SMALL BUSINESS INNOVATION RESEARCH AND SMALL BUSINESS TECHNOLOGY TRANSFER IMPROVEMENTS ACT OF 2017

SEPTEMBER 14, 2017.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. SMITH of Texas, from the Committee on Science, Space, and Technology, submitted the following

REPORT

[To accompany H.R. 2763]

[Including cost estimate of the Congressional Budget Office]

The Committee on Science, Space, and Technology, to whom was referred the bill (H.R. 2763) to amend the Small Business Act to improve the Small Business Innovation Research program and Small Business Technology Transfer program, and for other purposes, having considered the same, report favorably thereon with an amendment and recommend that the bill as amended do pass.

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The amendment is as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the "Small Business Innovation Research and Small Business Technology Transfer Improvements Act of 2017".

SEC. 2. REPORTING REQUIREMENTS

(a) Annual Report to Congress.—Section 9(b)(7) of the Small Business Act (15 U.S.C. 638(b)(7)) is amended by striking "to report not less than annually" and inserting "to submit a report not later than December 31 of each year".

(b) Annual Report to SBA and the Office of Science and Technology Policy.—Section 9(g)(9) of the Small Business Act (15 U.S.C. 638(g)(9)) is amended—

(1) by striking "make an annual report" and inserting "not later than March 30 of each year, submit a report"; and (2) by striking "and the Office of Science and Technology Policy" and inserting ", the Office of Science and Technology Policy, the Committee on Science, Space, and Technology and the Committee on Small Business of the House of Representatives, and the Committee on Small Business and Entrepreneurship of the Senate".

SEC. 3. REQUIRING INSERTION INCENTIVES.

Section 9(y)(5) of the Small Business Act (15 U.S.C. 638(y)(5)) is amended by striking "is authorized to" and inserting "shall".

SEC. 4. SBIR PHASE FLEXIBILITY.

Section 9(cc) of the Small Business Act (15 U.S.C. 638(cc)) is amended by striking "During fiscal years" and all that follows through "may each provide" and inserting "During fiscal years 2018 through 2022, all agencies participating in the SBIR program may provide".

SEC. 5. ESTABLISHING THE CIVILIAN AGENCY COMMERCIALIZATION READINESS PROGRAM.

Section 9(gg) of the Small Business Act (15 U.S.C. 638(gg)) is amended-

(1) by amending the subsection heading to read as follows: "CIVILIAN AGENCY COMMERCIALIZATION READINESS PROGRAM";

(2) in paragraph (1), by inserting "to establish a Civilian Agency Commercialization Readiness Program for civilian agencies" after "the covered Federal agency";

(3) in paragraph (2)(A)-

(A) by striking "establish a pilot program" and inserting "establish a Cilian Agency Commercialization Readiness Program under this subvilian Agency

(B) by striking "the pilot program" and inserting "such Civilian Agency

Commercialization Readiness Program";

(4) in paragraphs (3) and (4), by striking "a pilot program" each place such term appears and inserting "a Civilian Commercialization Readiness Program";

(5) in paragraph (6), by striking "the pilot program" and inserting "a Civilian Agency Commercialization Readiness Program'

(6) by striking paragraph (7) and redesignating paragraph (8) as paragraph

(7) in paragraph (7) (as so redesignated), by amending subparagraph (B) to

"(B) the term 'Civilian Agency Commercialization Readiness Program' means each program established under paragraph (1)."

SEC. 6. EXTENSION OF DEADLINE FOR ASSISTANCE FOR ADMINISTRATIVE, OVERSIGHT, AND CONTRACT PROCESSING COSTS.

Section 9(mm)(1) of the Small Business Act (15 U.S.C. 638(mm)(1)) is amended by striking "September 30, 2017" and inserting "September 30, 2022".

SEC. 7. IMPROVEMENTS TO TECHNICAL AND BUSINESS ASSISTANCE IN THE SBIR AND STTR

Section 9(q) of the Small Business Act (15 U.S.C. 638(q)) is amended-

(1) in the subsection heading, by inserting "AND BUSINESS" after "TECHNICAL";

(2) in paragraph (1)-

- (A) in the matter preceding subparagraph (A)—
 - (i) by striking "a vendor selected under paragraph (2)" and inserting "1 or more vendors selected under paragraph (2)(A)

(iii) by inserting "and business" before "assistance services"; and
(iii) by inserting "assistance with product sales, intellectual property
protections, market research, market validation, and development of
regulatory plans and manufacturing plans," after "technologies,"; and
(B) in subparagraph (D), by inserting ", including intellectual property

protections" before the period at the end;

(3) in paragraph (2)-

- (A) by striking "Each agency may select a vendor to assist small business concerns to meet" and inserting the following:
- (A) IN GENERAL.—Each agency may select 1 or more vendors from which small business concerns may obtain assistance in meeting"; and

(B) by adding at the end the following:

"(B) SELECTION BY SMALL BUSINESS CONCERN.—A small business concern may, by contract or otherwise, select 1 or more vendors to assist the small business concern in meeting the goals listed in paragraph (1)."; and (4) in paragraph (3)-

(A) by inserting "(A)" after "paragraph (2)" each place it appears;

(B) in subparagraph (A), by striking "\$5,000 per year" each place it appears and inserting "\$6,500 per project";

(C) in subparagraph (B)-

(i) by striking "\$5,000 per year" each place it appears and inserting

"\$35,000 per project"; and
(ii) in clause (ii), by striking "which shall be in addition to the amount of the recipient's award" and inserting "which may, as determined to the amount of the recipient's award." mined appropriate by the head of the agency, be included as part of the recipient's award or be in addition to the amount of the recipient's award":

(D) in subparagraph (C)-

(i) by inserting "or business" after "technical";
(ii) by striking "the vendor" and inserting "a vendor"; and
(iii) by adding at the end the following: "Business-related services
may be obtained from an entity, such as a public or private organization or an agency of or other entity established or funded by a State, that facilitates or accelerates the commercialization of technologies or assists in the creation and growth of private enterprises that are commercializing technology.";

(E) in subparagraph (D)

(i) by inserting "or business" after "technical" each place it appears; and

(ii) in clause (i)-

(I) by striking "the vendor" and inserting "1 or more vendors";

(II) by striking "provides" and inserting "provide"; and (F) by adding at the end the following:
"(E) MULTIPLE AWARD RECIPIENTS.—The Administrator shall establish a limit on the amount of technical and business assistance services that may be received or purchased under subparagraph (B) by a small business concern that has received multiple Phase II SBIR or STTR awards for a fiscal year.".

SEC. 8. ADDITIONAL SBIR AND STTR TECHNOLOGY INSERTION REPORTING REQUIREMENT.

Section 9(v)(6) of the Small Business Act (15 U.S.C. 638(v)(6)) is amended-

(1) in subparagraph (B), by striking "and" at the end;

(2) in subparagraph (C)(iii), by striking the period at the end and inserting "; and"; and

(3) by adding at the end the following new subparagraph:

(D) not later than 120 days after the date of the enactment of this subparagraph, and not later than December 31 of each year thereafter, submit to the Committee on Science, Space, and Technology and the Committee on Small Business of the House of Representatives, and to the Committee on Small Business and Entrepreneurship of the Senate, a report describing the goals set under subparagraph (A) and the incentives used or created under subparagraph (B).'

SEC. 9. CONTINGENT LIMITATION ON USE OF CERTAIN FUNDS PENDING SUBMISSION OF RE-

(a) Report Deadline.—The Administrator of the Small Business Administration shall submit the annual report required under section 9(b)(7) of the Small Business Act (15 U.S.C. 638(b)(7)) not later than the last day of each calendar year.

(b) Prohibition on Availability of Funds for Failure to Submit Report. If the Administrator does not meet the deadline for submission under subsection (a) with respect to a calendar year, no funds authorized to be appropriated or otherwise made available to the Small Business Administration by this Act, or any other Act, may be obligated or expended for travel by the Administrator for the following calendar year until such time as the Administrator submits the report described under subsection (a).

SEC. 10. ENCOURAGING INNOVATION IN UNITED STATES MANUFACTURING.

Section 9 of the Small Business Act (15 U.S.C. 638) is amended by adding at the end the following:

'(tt) Encouraging Innovation in United States Manufacturing.—In carrying

out this section, the Administrator shall-

(1) ensure that, in selecting small business concerns to participate in SBIR or STTR programs under this section, Federal agencies give high priority to small manufacturing companies and other small business concerns that are engaged in manufacturing research and development for the purpose of developing and producing new products and technologies in the United States; and "(2) include in the annual report to Congress under subsection (b)(7) a deter-

mination of whether the priority described in paragraph (1) is being carried

out.".

SEC. 11. ENCOURAGING INNOVATION IN CYBERSECURITY.

Section 9 of the Small Business Act (15 U.S.C. 638), as amended by section 10 of this Act, is further amended by adding at the end the following:

"(uu) ENCOURAGING INNOVATION IN CYBERSECURITY.—In carrying out this section,

the Administrator shall-

(1) ensure that, in selecting small business concerns to participate in SBIR or STTR programs under this section, Federal agencies give high priority to small business concerns that are engaged in cybersecurity research and development, for the purpose of developing and implementing technology services and products to strengthen the security of United States Government and private computer systems, including software, hardware, and portable devices; and "(2) include in the annual report to Congress under subsection (b)(7) a deter-

mination of whether the priority described in paragraph (1) is being carried

SEC. 12. INNOVATIVE APPROACHES TO TECHNOLOGY TRANSFER.

Section 9(jj) of the Small Business Act (15 U.S.C. 638(jj)) is amended to read as follows:

'(jj) Innovative Approaches to Technology Transfer.—

"(1) Grant Program.-

"(A) IN GENERAL.—Each Federal agency required by subsection (n) to establish an STTR program shall carry out an Innovative Approaches to Technology Transfer Grant Program (hereinafter referred to as a 'Program') to support innovative approaches to technology transfer at institutions of higher education (as defined in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)), nonprofit research institutions, and Federal laboratories in order to accelerate the commercialization of federally funded research and technology by small business concerns, including new busi-

(B) Awarding of grants to qualifying institutions.—

(i) IN GENERAL.—Each Federal agency described in subparagraph (A) shall provide grants, through a competitive, merit-based process, in the amounts listed in subparagraph (C)(i) to institutions of higher education, technology transfer organizations that facilitate the commercialization of technologies developed by one or more such institutions of higher education, Federal laboratories, other public and private non-profit entities, and consortia thereof, for initiatives that help identify high-quality, commercially viable federally funded research and tech-nologies and to facilitate and accelerate their transfer into the marketplace.

"(ii) Selection process and applications.—Qualifying institutions seeking a grant under this subsection shall submit an application to a Federal agency described in subparagraph (A) at such time, in such manner, and containing such information as the agency may require.

The application shall include, at a minimum-

(I) a description of innovative approaches to technology transfer, technology development, and commercial readiness that have the potential to increase or accelerate technology transfer outcomes and can be adopted by other qualifying institutions, or a demonstration of proven technology transfer and commercialization strategies, or a plan to implement proven technology transfer and commercialization strategies, that can achieve greater commercialization of federally funded research and technologies with Program funding;

"(II) a description of how the qualifying institution will contribute to local and regional economic development efforts; and

"(III) a plan for sustainability beyond the duration of the funding

"(iii) USE OF FUNDS.—Activities supported by grants under this subsection may include-"(I) providin

providing early-stage proof of concept funding for translational research;

"(II) identifying research and technologies at recipient institu-tions that have the potential for accelerated commercialization; "(III) technology maturation funding to support activities such as prototype construction, experiment analysis, product comparison,

and collecting performance data;

"(IV) technical validations, market research, clarifying intellectual property rights position and strategy, and investigating commercial and business opportunities; and

(V) programs to provide advice, mentoring, entrepreneurial education, project management, and technology and business develop-ment expertise to innovators and recipients of technology transfer licenses to maximize commercialization potential.

"(iv) Program oversight board.

"(I) IN GENERAL.—Successful applications required under clause
(ii) shall include a plan to assemble a Program Oversight Board,
the members of which shall have technical, scientific, or business
expertise and shall be drawn from industry, start-up companies, venture capital, technical enterprises, financial institutions, and business development organizations.

"(II) PROJECT AWARDS.—A Program Oversight Board shall— (aa) establish award programs for individual projects;

"(bb) provide rigorous evaluation of project applications; "(cc) determine which projects should receive awards, in accordance with guidelines established by the Board;

(dd) establish milestones and associated award amounts for projects that reach milestones;

(ee) determine whether awarded projects are reaching mile-

stones; and

"(ff) develop a process to reallocate outstanding award amounts from projects that are not reaching milestones to other projects with more potential.

"(C) GRANT AND AWARD AMOUNTS.

(i) GRANT AMOUNTS.—Each Federal agency described in subparagraph (A) may make grants under subparagraph (B) to qualifying institutions for up to \$1,000,000 per year for up to 3 years.

"(ii) AWARD AMOUNTS.—Each qualifying institution that receives a grant under subparagraph (B) shall provide awards for individual projects of not more than \$150,000, to be provided in phased amounts, based on reaching the milestones established by the qualifying institution's Program Oversight Board.

"(D) AUTHORIZED EXPENDITURES FOR THE PROGRAM.—

"(i) PERCENTAGE.—The percentage of the extramural budget that each Federal agency described under subparagraph (A) expends on a Program shall be-

(I) 0.05 percent for each of fiscal years 2018 and 2019; and "(II) 0.1 percent for each of fiscal years 2020 and 2021.

"(ii) Treatment of expenditures.—Any portion of the extramural budget expended by a Federal agency on a Program shall apply wards the agency's expenditure requirements under subsection (n). "(2) Program evaluation and data collection and dissemination.

"(A) EVALUATION PLAN AND DATA COLLECTION.—Each Federal agency required by paragraph (1)(A) to establish a Program shall develop a program evaluation plan and collect, annually, such information from grantees as is necessary to assess the Program. Program evaluation plans shall require the collection of data aimed at identifying outcomes resulting from the transfer of technology with assistance from the Program, such as—

(i) specific follow-on funding identified or obtained, including follow-

on funding sources, such as Federal sources or private sources;

"(ii) the number of projects which result in a license to a start-up company or an established company with sufficient resources for effective commercialization within 5 years of receiving an award under paragraph (1)(C)(ii);

"(iii) invention disclosures and patents;

"(iv) the number of projects supported by qualifying institutions receiving a grant under paragraph (1)(C)(i) that secure Phase I or Phase II SBIR or STTR awards;

"(v) available information on revenue, sales, or other measures of products that have been commercialized as a result of projects awarded under paragraph (1)(C)(ii);

"(vi) the number and location of jobs created resulting from projects

awarded under paragraph (1)(C)(ii); and

"(vii) other data as considered appropriate by a Federal agency required by this subparagraph to develop a program evaluation plan.

- "(B) EVALUATIVE REPORT TO CONGRESS.—The head of each Federal agency that has a Program shall submit to the Committee on Science, Space, and Technology and the Committee on Small Business of the House of Representatives and the Committee on Small Business and Entrepreneurship of the Senate an evaluative report regarding the activities of the Program. The report shall include—
 - (i) a detailed description of the implementation of the Program;
 - "(ii) a detailed description of the grantee selection process;
 - "(iii) an accounting of the funds used in the Program; and "(iv) a summary of the data collected under subparagraph (A).
- "(C) Data dissemination.—For purposes of Program transparency and dissemination of best practices, the Administrator shall include, on the public database under subsection (k)(1), information on the Program, including—
 - "(i) the program evaluation plan required under subparagraph (A); "(ii) a list of recipients of awards under paragraph (1)(C)(ii); and
 - "(iii) information on the use of grants under paragraph (1)(C)(i) by recipient institutions."

COMMITTEE STATEMENT AND VIEWS

PURPOSE AND SUMMARY

H.R. 2763, the Small Business Innovation Research and Small Business Technology Transfer Improvements Act of 2017, is sponsored by Rep. Stephen Knight. The purpose of H.R. 2763 is to improve the effectiveness of the SBIR and STTR programs. The objectives of these programs are achieving mission-specific federally funded research and development (R&D) through small businesses, stimulation of technological innovation in the small business sector by their commercializing the results of such R&D, and increased use of this community to meet the government's diverse research and development needs.

BACKGROUND AND NEED FOR LEGISLATION

In December 2016, the President signed into law a five-year straight-line reauthorization extension of the current SBIR and STTR programs as part of the National Defense Authorization Act for Fiscal Year 2017 (P.L. 114–328). Needed policy improvements, updates and oversight for the two programs were not included in the reauthorization. The five-year authorization continues 3.65 percent of already appropriated extramural R&D dollars to be reserved for small businesses through these programs, for a total of approximately \$3 billion annually.

On June 15, 2017 the House Small Business Committee markedup and ordered to be reported H.R. 2763, the "Small Business Innovation Research and Small Business Technology Transfer Improvements Act of 2017," as amended, by voice vote. The bill was also referred to the House Science, Space, and Technology Committee, which shares jurisdiction over the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs.

LEGISLATIVE HISTORY

On June 16, 2016, the Research and Technology Subcommittee held a hearing entitled, "SBIR/STTR Reauthorization: A Review of Technology Transfer." Witnesses were: Dr. Pramod Khargonekar, Assistant Director for Directorate of Engineering, National Science Foundation; Dr. Michael Lauer, Deputy Director of Extramural Research, National Institutes of Health; Dr. Patricia Dehmer, Deputy Director for Science Programs, Office of Science, Department of Energy; Ms. Jilda D. Garton, Vice President for Research and General

Manager, Georgia Tech Research Corporation.

On May 4, 2017, the Research and Technology Subcommittee and the Contracting and Workforce Subcommittee of the Small Business Committee held a joint hearing entitled, "Improving the Small Business Innovation Research and Small Business Technology Transfer Programs." Witnesses were: Mr. Joe Shepard, Associate Administrator, Office of Investment and Innovation, United States Small Business Administration; Mr. John Neumann, Director, Natural Resources and Environment, U.S. Government Accountability Office; Mr. John Clanton, Chief Executive Officer, Lynntech, Inc.; Dr. John S. Langford, Chairman and CEO, Aurora Flight Sciences Corporation; Mr. Ron Shroder, CEO and President, Frontier Technologies; Ms. Angela M. Albán, President and CEO, SIMETRI, Inc.; Dr. Clinton T. Rubin, SUNY Distinguished Professor and Chair, Department of Biomedical Engineering, Director, Center for Biotechnology.

On June 22, 2017, the full Committee amended and approved by voice vote H.R. 2763, the Small Business Innovation Research and Small Business Technology Transfer Improvements Act of 2017.

COMMITTEE VIEWS

The SBA has failed to submit its statutorily required annual report for several years. This report and other information required to be supplied to Congress are essential. In H.R. 2763, the Committee adjusted deadlines in order to help SBA. In order to punctuate the Committee's insistence on SBA meeting its responsibilities, the Committee also imposed a limitation on the Small Business Administrator's travel budget in the event that SBA does not meet its annual reporting responsibility.

The Committee recognizes the importance of a strong U.S. manufacturing sector, including support and encouragement for innovation among small manufacturers. In Section 10 of H.R. 2763, the Committee directs Federal agencies to accord priority to competitive SBIR and STTR applications that propose research and development to spur manufacturing and manufacturing jobs in the U.S.

The Committee also recognizes the economic and national security implication of increased cybersecurity threats to the U.S. Government and private organizations and individuals. In Section 11 of H.R. 2763, the Committee directs Federal agencies to accord priority to competitive SBIR and STTR applications that propose research and development to strengthen cybersecurity technology for the U.S. Government and the private sector.

SECTION-BY-SECTION

Sec. 1. Short title

This section designates the bill the "Small Business Innovation Research and Small Business Technology Transfer Improvements Act of 2017."

Sec. 2. Reporting requirements

This section requires the Small Business Administration (SBA) to file its annual report on the SBIR and STTR programs to Congress by December 31 of each calendar year. The section also requires each of the participating agencies to submit all of the required reports and information to the SBA by March 30 of each year.

Sec. 3. Requirements for insertion incentives

This section clarifies Congressional intent from the 2011 reauthorization by ensuring the Department of Defense establishes goals and insertion incentives for the transition of Phase III technology in subcontracting plans for any contracts with a value of \$100 million or more.

Sec. 4. SBIR phase flexibility

This section extends through FY2022 the pilot program, instituted in the 2011 reauthorization (P.L. 112–81, §5106) that allows three agencies (Department of Defense, the National Institutes of Health, and the Department of Education) to award a Phase II contract if the agency finds that the small business concern has already completed work typically done during Phase I. This section also extends this flexibility to all participating agencies.

Sec. 5. Establishing the Civilian Agency Commercialization Readiness Program

This section makes permanent the pilot program established in the 2011 reauthorization (P.L. 112–81, §5123) that authorizes all civilian agencies to create Commercialization Readiness Programs (CRPs) by allocating no more than 10 percent of their program authorization to maximize advanced development of small business technologies that are facing high manufacturing or regulatory costs.

Sec. 6. Extension of the deadline for assistance for administrative, oversight, and contract processing costs

This section extends through FY2022 the pilot program authorizing agencies to utilize up to three percent of the allocations under the SBIR program for various administrative functions associated with operation of the SBIR and STTR programs.

Sec. 7. Improvements to technical and business assistance in the SBIR and STTR Programs

This section clarifies the types and dollar amounts of technical and business assistance that a small business may pay for with SBIR and STTR funds.

Sec. 8. Additional SBIR and STTR technology insertion requirement

This section requires the Small Business Administrator to report to the Science, Space, and Technology Committee and the Small Business Committee of the House of Representatives and the Small Business and Entrepreneurship Committee of the Senate on the goals and incentives used or created for technology insertion.

Sec. 9. Contingent limitations on use of certain funds pending submission of report

This section clarifies that the Small Business Administrator must submit the annual report to Congress required under Section 9(b)(7) of the Small Business Act (U.S.C. 638(b)(7)) not later than the last day of each calendar year. This section also stipulates, in the event the Administrator does not submit the required report on time, that no funds authorized or appropriated to the Small Business Administration may be obligated or spent for travel by the Administrator during the following calendar year until the Administrator submits the required report.

Sec. 10. Encouraging innovation in United States manufacturing

This section requires that in carrying out the SBIR and STTR programs, the Administrator shall give high priority to small manufacturing companies and other small business concerns that are engaged in manufacturing research and development for the purpose of developing and producing new products and technologies in the United States. This section also requires the Administrator to include in the annual report to Congress required under Section 9(b)(7) a determination about whether this priority is being carried

Sec. 11. Encouraging innovation in cyber security

This section requires that in carrying out the SBIR and STTR programs, the Administrator shall give high priority to firms that are engaged in cyber security research and development for the purpose of developing and implementing technology services and products to strengthen the security of United States Government and private computer systems, including software, hardware and portable devices. This section also requires the Administrator to include in the annual report to Congress required under Section 9(b)(7) a determination about whether this priority is being carried out.

Sec. 12. Innovative approaches to technology transfer

This section requires each Federal agency that participates in the STTR program to carry out an Innovative Approaches to Technology Transfer Grant Program. This Program supports innovative approaches to technology transfer at institutions of higher education (as defined in 3 section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)), nonprofit research institutions, and Federal laboratories in order to accelerate the commercialization of federally funded research and technology by small business concerns, including new businesses. This section also establishes grantee eligibility, application, and agency evaluation criteria for awarding grants, as well as setting limitations on grant amounts,

eligible expenditures for grant funds, and agency data collection and program evaluation and oversight requirements. Finally, this section requires each affected agency to submit an annual report about the Program to the Science, Space, and Technology Committee and the Small Business Committee of the House of Representatives and the Small Business and Entrepreneurship Committee of the Senate.

EXPLANATION OF AMENDMENTS

A Manager's amendment offered by Chairman Lamar Smith was adopted by the Committee. The amendment adjusted the due date for the annual report required in Section 9(b)(7) and specified the Congressional committees that are to receive the report.

An amendment offered by Representative Barry Loudermilk was adopted by the Committee. The amendment established a limitation on funding for the Small Business Administrator if the report to Congress described in Section 9(b)(7) is not submitted on time.

An amendment offered by Representative Randy Hultgren was adopted by the Committee. The amendment established a priority for SBIR and STTR awards for research and technological innovation on behalf of advanced manufacturing in the United States.

An amendment offered by Representative Clay Higgins was adopted by the Committee. The amendment established a priority for SBIR and STTR awards for cybersecurity research and technological innovation to benefit the U.S. Government and private computer systems.

An amendment offered by Representative Daniel Lipinski was adopted by the Committee. The amendment established an Innovative Approaches to Technology Transfer Program.

COMMITTEE CONSIDERATION

On July 22, 2017, the Committee met in open session and ordered reported favorably the bill, H.R. 2763, as amended, by voice vote, a quorum being present.

APPLICATION OF LAW TO THE LEGISLATIVE BRANCH

Section 102(b)(3) of Public Law 104–1 requires a description of the application of this bill to the legislative branch where the bill relates to the terms and conditions of employment or access to public services and accommodations. This bill improves the effectiveness of the SBIR and STTR programs. As such this bill does not relate to employment or access to public services and accommodations.

STATEMENT OF OVERSIGHT FINDINGS AND RECOMMENDATIONS OF THE COMMITTEE

In compliance with clause 3(c)(1) of rule XIII and clause (2)(b)(1) of rule X of the Rules of the House of Representatives, the Committee's oversight findings and recommendations are reflected in the descriptive portions of this report.

STATEMENT OF GENERAL PERFORMANCE GOALS AND OBJECTIVES

In accordance with clause 3(c)(4) of rule XIII of the Rules of the House of Representatives, the Committee's performance goals and objectives are to improve the effectiveness of the SBIR and STTR programs.

DUPLICATION OF FEDERAL PROGRAMS

No provision of H.R. 2763 establishes or reauthorizes a program of the Federal Government known to be duplicative of another Federal program, a program that was included in any report from the Government Accountability Office to Congress pursuant to section 21 of Public Law 111–139, or a program related to a program identified in the most recent Catalog of Federal Domestic Assistance.

DISCLOSURE OF DIRECTED RULE MAKINGS

The Committee estimates that enacting H.R. 2763 does not direct the completion of any specific rule makings within the meaning of 5 U.S.C. 551.

FEDERAL ADVISORY COMMITTEE ACT

The Committee finds that the legislation does not establish or authorize the establishment of an advisory committee within the definition of 5 U.S.C. App., Section 5(b).

Unfunded Mandate Statement

Section 423 of the Congressional Budget and Impoundment Control Act (as amended by Section 101(a)(2) of the Unfunded Mandate Reform Act, P.L. 104–4) requires a statement as to whether the provisions of the reported include unfunded mandates. In compliance with this requirement the Committee has received a letter from the Congressional Budget Office included herein.

EARMARK IDENTIFICATION

H.R. 2763 does not include any congressional earmarks, limited tax benefits, or limited tariff benefits as defined in clause 9 of rule XXI.

COMMITTEE ESTIMATE

Clause 3(d)(2) of rule XIII of the Rules of the House of Representatives requires an estimate and a comparison by the Committee of the costs that would be incurred in carrying out H.R. 2763. However, clause 3(d)(3)(B) of that rule provides that this requirement does not apply when the Committee has included in its report a timely submitted cost estimate of the bill prepared by the Director of the Congressional Budget Office under section 402 of the Congressional Budget Act.

BUDGET AUTHORITY AND CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

With respect to the requirements of clause 3(c)(2) of rule XIII of the Rules of the House of Representatives and section 308(a) of the Congressional Budget Act of 1974 and with respect to requirements of clause (3)(c)(3) of rule XIII of the Rules of the House of Representatives and section 402 of the Congressional Budget Act of 1974, the Committee has received the following cost estimate for H.R. 2763 from the Director of Congressional Budget Office:

U.S. Congress, Congressional Budget Office, Washington, DC, August 17, 2017.

Hon. LAMAR SMITH,

Chairman, Committee on Science, Space, and Technology, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 2763, the Small Business Innovation Research and Small Business Technology Transfer Improvements Act of 2017.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Stephen Rabent.

Sincerely,

KEITH HALL.

Enclosure.

H.R. 2763—Small Business Innovation Research and Small Business Technology Transfer Improvements Act of 2017

Under current law, the Small Business Innovation Research (SBIR) and the Small Business Technology Transfer (STTR) programs require federal agencies with extramural budgets for research and development (R&D) that exceed specified amounts to set aside a specified percent of that budget for contracts with small businesses or for cooperative research between small businesses and a federal laboratory or nonprofit research institution. Eleven agencies currently participate in those programs. A pilot program that authorizes participating agencies to use up to 3 percent of the R&D amounts set aside for the SBIR program to cover certain administrative costs will expire at the end of fiscal year 2017.

H.R. 2763 would:

- Extend the pilot program through fiscal year 2022,
- Require agencies in the STTR program to create a new program to provide grants to federal laboratories and research institutions that support the commercialization of federally funded research and technologies,
- Change certain annual reporting requirements for participating agencies and the Small Business Administration (SBA), and
- Direct the SBA to ensure that participating agencies prioritize SBIR and STTR funding for certain types of small businesses.

Because the pilot program does not affect the underlying costs of administering the SBIR or STTR programs, CBO estimates that extending the pilot program would have no budgetary effect. Based on an analysis of information from the SBA and several participating agencies, CBO estimates that implementing other provisions of H.R. 2763 would cost \$5 million over the 2018–2022 period mostly for each agency participating in the STTR program to hire one additional employee to develop and implement the new grant program and for the SBA to update program rules and policy direc-

tives; such spending would be subject to the availability of appropriated funds.

Enacting the bill would not affect direct spending or revenues;

therefore, pay-as-you-go procedures do not apply.

CBO estimates that enacting H.R. 2763 would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2028.

H.R. 2763 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act and would not affect the budgets of state, local, or tribal governments.

The CBO staff contact for this estimate is Stephen Rabent. The estimate was approved by H. Samuel Papenfuss, Deputy Assistant Director for Budget Analysis.

CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 3(e) of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, and existing law in which no change is proposed is shown in roman):

SMALL BUSINESS ACT

* * * * * * *

SEC. 9. (a) Research and development are major factors in the growth and progress of industry and the national economy. The expense of carrying on research and development programs is beyond the means of many small-business concerns, and such concerns are handicapped in obtaining the benefits of research and development programs conducted at Government expense. These small-business concerns are thereby placed at a competitive disadvantage. This weakens the competitive free enterprise system and prevents the orderly development of the national economy. It is the policy of the Congress that assistance be given to small-business concerns to enable them to undertake and to obtain the benefits of research and development in order to maintain and strengthen the competitive free enterprise system and the national economy.

(b) It shall be the duty of the Administration, and it is hereby

empowered—

(1) to assist small-business concerns to obtain Government contracts for research and development;

(2) to assist small-business concerns to obtain the benefits of research and development performed under Government contracts or at Government expense;

(3) to provide technical assistance to small-business concerns

to accomplish the purposes of this section; and

(4) to develop and maintain a source file and an information program to assure each qualified and interested small business concern the opportunity to participate in Federal agency small business innovation research programs and small business technology transfer programs;

(5) to coordinate with participating agencies a schedule for release of SBIR and STTR solicitations, and to prepare a mas-

ter release schedule so as to maximize small business' opportunities to respond to solicitations;

(6) to independently survey and monitor the operation of SBIR and STTR programs within participating Federal agencies;

(7) [to report not less than annually] to submit a report not later than December 31 of each year to the Committee on Small Business of the Senate, and to the Committee on Science and the Committee on Small Business of the House of Representatives, on the SBIR and STTR programs of the Federal agencies and the Administration's information and monitoring efforts related to the SBIR and STTR programs, including-

(A) the data on output and outcomes collected pursuant

to subsections (g)(8) and (o)(9);

(B) the number of proposals received from, and the number and total amount of awards to, HUBZone small business concerns and firms with venture capital, hedge fund, or private equity firm investment (including those majority-owned by multiple venture capital operating companies, hedge funds, or private equity firms) under each of the SBIR and STTR programs;

(C) a description of the extent to which each Federal agency is increasing outreach and awards to firms owned and controlled by women or by socially or economically disadvantaged individuals under each of the SBIR and STTR

programs;

(D) general information about the implementation of, and compliance with the allocation of funds required under, subsection (dd) for firms owned in majority part by venture capital operating companies, hedge funds, or private equity firms and participating in the SBIR program;

(E) a detailed description of appeals of Phase III awards and notices of noncompliance with the SBIR Policy Directive and the STTR Policy Directive filed by the Adminis-

trator with Federal agencies;

(F) an accounting of funds, initiatives, and outcomes under the Commercialization Readiness Program; and

(G) a description of the extent to which Federal agencies are providing in a timely manner information needed to maintain the database described in subsection (k);

(8) to provide for and fully implement the tenets of Executive Order No. 13329 (Encouraging Innovation in Manufacturing);

and

(9) to coordinate the implementation of electronic databases at each of the Federal agencies participating in the SBIR program or the STTR program, including the technical ability of the participating agencies to electronically share data.

(c) The Administration is authorized to consult and cooperate with all Government agencies and to make studies and recommendations to such agencies, and such agencies are authorized and directed to cooperate with the Administration in order to carry

out and to accomplish the purposes of this section.

(d)(1) The Administrator is authorized to consult with representatives of small-business concerns with a view to assisting and encouraging such firms to undertake joint programs for research and development carried out through such corporate or other mechanism as may be most appropriate for the purpose. Such joint programs may, among other things, include the following purposes:

(A) to construct, acquire, or establish laboratories and other

facilities for the conduct of research;

(B) to undertake and utilize applied research;

(C) to collect research information related to a particular industry and disseminate it to participating members;

(D) to conduct applied research on a protected, proprietary, and contractual basis with member or nonmember firms, Government agencies, and others;

(E) to prosecute applications for patents and render patent

services for participating members; and

(F) to negotiate and grant licenses under patents held under the point program, and to establish corporations designed to

exploit particular patents obtained by it.

- (2) The Administrator may, after consultation with the Attorney General and the Chairman of the Federal Trade Commission, and with the prior written approval of the Attorney General, approve any agreement between small-business firms providing for a joint program of research and development, if the Administrator finds that the joint program proposed will maintain and strengthen the free enterprise system and the economy of the Nation. The Administrator or the Attorney General may at any time withdraw his approval of the agreement and the joint program of research and development covered thereby, if he finds that the agreement or the joint program carried on under it is no longer in the best interests of the competitive free enterprise system and the economy of the Nation. A copy of the statement of any such finding and approval intended to be within the coverage of this subsection, and a copy of any modification or withdrawal of approval, shall be published in the Federal Register. The authority conferred by this subsection on the Administrator shall not be delegated by him.
- (3) No act or omission to act pursuant to and within the scope of any joint program for research and development, under an agreement approved by the Administrator under this subsection, shall be construed to be within the prohibitions of the antitrust laws or the Federal Trade Commission Act. Upon publication in the Federal Register of the notice of withdrawal of his approval of the agreement granted under this subsection, either by the Administrator or by the Attorney General, the provisions of this subsection shall not apply to any subsequent act or omission to act by reason of such agreement or approval.

(e) For the purpose of this section—

(1) the term "extramural budget" means the sum of the total obligations minus amounts obligated for such activities by employees of the agency in or through Government-owned, Government-operated facilities, except that for the Agency for International Development it shall not include amounts obligated solely for general institutional support of international research centers or for grants to foreign countries, and except that for the Department of Energy it shall not include amounts obligated for atomic energy defense programs for weapons and weapons-related activities or for naval reactor programs;

(2) the term "Federal agency" means an executive agency as defined in section 105 of title 5, United States Code, or a military department as defined in section 102 of such title, except that it does not include any agency within the Intelligence Community (as the term is defined in section 3.4(f) of Executive Order 12333 or its successor orders);

(3) the term "funding agreement" means any contract, grant, or cooperative agreement entered into between any Federal agency and any small business for the performance of experimental, developmental, or research work funded in whole or in

part by the Federal Government;
(4) the term "Small Business Innovation Research Program" or "SBIR" means a program under which a portion of a Federal agency's research or research and development effort is reserved for award to small business concerns through a uniform process having-

(A) a first phase for determining, insofar as possible, the scientific and technical merit and feasibility of ideas that appear to have commercial potential, as described in subparagraph (B), submitted pursuant to SBIR program solici-

tations;

(B) a second phase, which shall not include any invitation, pre-screening, or pre-selection process for eligibility for Phase II, that will further develop proposals which meet particular program needs, in which awards shall be made based on the scientific and technical merit and feasibility of the proposals, as evidenced by the first phase, considering, among other things, the proposal's commercial potential, as evidenced by—

(i) the small business concern's record of successfully

commercializing SBIR or other research;

(ii) the existence of second phase funding commitments from private sector or non-SBIR funding

(iii) the existence of third phase, follow-on commit-

ments for the subject of the research; and

(iv) the presence of other indicators of the commer-

cial potential of the idea; and

(C) where appropriate, a third phase for work that derives from, extends, or completes efforts made under prior

funding agreements under the SBIR program

(i) in which commercial applications of SBIR-funded research or research and development are funded by non-Federal sources of capital or, for products or services intended for use by the Federal Government, by follow-on non-SBIR Federal funding awards; or
(ii) for which awards from non-SBIR Federal fund-

ing sources are used for the continuation of research or research and development that has been competitively selected using peer review or merit-based selec-

tion procedures;

(5) the term "research" or "research and development" means any activity which is (A) a systematic, intensive study directed toward greater knowledge or understanding of the subject studied; (B) a systematic study directed specifically toward applying new knowledge to meet a recognized need; or (C) a systematic application of knowledge toward the production of useful materials, devices, and systems or methods, including design, development, and improvement of prototypes and new

processes to meet specific requirements;

(6) the term "Small Business Technology Transfer Program" or "STTR" means a program under which a portion of a Federal agency's extramural research or research and development effort is reserved for award to small business concerns for cooperative research and development through a uniform process having—

(A) a first phase, to determine, to the extent possible, the scientific, technical, and commercial merit and feasibility of ideas submitted pursuant to STTR program solici-

tations;

(B) a second phase, which shall not include any invitation, pre-screening, or pre-selection process for eligibility for Phase II, that will further develop proposals that meet particular program needs, in which awards shall be made based on the scientific, technical, and commercial merit and feasibility of the idea, as evidenced by the first phase and by other relevant information; and

(C) where appropriate, a third phase for work that derives from, extends, or completes efforts made under prior

funding agreements under the STTR program—

(i) in which commercial applications of STTR-funded research or research and development are funded by non-Federal sources of capital or, for products or services intended for use by the Federal Government, by follow-on non-STTR Federal funding awards; and

(ii) for which awards from non-STTR Federal funding sources are used for the continuation of research or research and development that has been competitively selected using peer review or scientific review

criteria;

(7) the term "cooperative research and development" means research or research and development conducted jointly by a small business concern and a research institution in which not less than 40 percent of the work is performed by the small business concern, and not less than 30 percent of the work is performed by the research institution;

(8) the term "research institution" means a nonprofit institution, as defined in section 4(5) of the Stevenson-Wydler Technology Innovation Act of 1980, and includes federally funded research and development centers, as identified by the National Scientific Foundation in accordance with the governmentwide Federal Acquisition Regulation issued in accordance with section 35(c)(1) of the Office of Federal Procurement Pol-

icy Act (or any successor regulation thereto);

(9) the term "commercial applications" shall not be construed to exclude testing and evaluation of products, services, or technologies for use in technical or weapons systems, and further, awards for testing and evaluation of products, services, or technologies for use in technical or weapons systems may be made in either Phase II or Phase III of the Small Business Innova-

tion Research Program and of the Small Business Technology Transfer Program, as defined in this subsection;

(10) the term "commercialization" means-

(A) the process of developing products, processes, tech-

nologies, or services; and

(B) the production and delivery (whether by the originating party or by others) of products, processes, technologies, or services for sale to or use by the Federal Government or commercial markets;

(11) the term "Phase I" means-

- (A) with respect to the SBIR program, the first phase described in paragraph (4)(A); and
- (B) with respect to the STTR program, the first phase described in paragraph (6)(A); (12) the term "Phase II" means—

- (A) with respect to the SBIR program, the second phase described in paragraph (4)(B); and
- (B) with respect to the STTR program, the second phase described in paragraph (6)(B); and

(13) the term "Phase III" means-

- (A) with respect to the SBIR program, the third phase described in paragraph (4)(C); and
- (B) with respect to the STTR program, the third phase described in paragraph (6)(C).
- (f) Federal Agency Expenditures for the SBIR Program.—
- (1) REQUIRED EXPENDITURE AMOUNTS.—Except as provided in paragraph (2)(B), each Federal agency which has an extramural budget for research or research and development in excess of \$100,000,000 for fiscal year 1992, or any fiscal year thereafter, shall expend with small business concerns-
 - (A) not less than 1.5 percent of such budget in each of fiscal years 1993 and 1994;
 - (B) not less than 2.0 percent of such budget in each of fiscal years 1995 and 1996;
 - (C) not less than 2.5 percent of such budget in each of fiscal years 1997 through 2011;
 - (D) not less than 2.6 percent of such budget in fiscal year 2012;
 - (E) not less than 2.7 percent of such budget in fiscal year 2013;
 - (F) not less than 2.8 percent of such budget in fiscal year 2014;
 - (G) not less than 2.9 percent of such budget in fiscal vear 2015;
 - (H) not less than 3.0 percent of such budget in fiscal year 2016; and
 - (I) not less than 3.2 percent of such budget in fiscal year 2017 and each fiscal year thereafter,

specifically in connection with SBIR programs which meet the requirements of this section, policy directives, and regulations issued under this section.

(2) LIMITATIONS.—A Federal agency shall not—

(A) use any of its SBIR budget established pursuant to paragraph (1) for the purpose of funding administrative costs of the program, including costs associated with salaries and expenses; or

(B) make available for the purpose of meeting the requirements of paragraph (1) an amount of its extramural budget for basic research which exceeds the percentages

specified in paragraph (1).

(3) EXCLUSION OF CERTAIN FUNDING AGREEMENTS.—Funding agreements with small business concerns for research or research and development which result from competitive or single source selections other than an SBIR program shall not be considered to meet any portion of the percentage requirements of paragraph (1).

(4) RULE OF CONSTRUCTION.—Nothing in this subsection may be construed to prohibit a Federal agency from expending with small business concerns an amount of the extramural budget for research or research and development of the agency that

exceeds the amount required under paragraph (1).

(g) Each Federal agency required by subsection (f) to establish a small business innovation research program shall, in accordance with this Act and regulations issued hereunder—

(1) unilaterally determine categories of projects to be in its

SBIR program;

- (2) issue small business innovation research solicitations in accordance with a schedule determined cooperatively with the Small Business Administration;
- (3) unilaterally determine research topics within the agency's SBIR solicitations, giving special consideration to broad research topics and to topics that further 1 or more critical technologies, as identified by—
 - (A) the National Critical Technologies Panel (or its successor) in the 1991 report required under section 603 of the National Science and Technology Policy, Organization, and Priorities Act of 1976, and in subsequent reports issued under that authority; or
 - (B) the Secretary of Defense, in the 1992 report issued in accordance with section 2522 of title 10, United States Code, and in subsequent reports issued under that author-
- (4)(A) unilaterally receive and evaluate proposals resulting from SBIR proposals; and

(B) make a final decision on each proposal submitted under

the SBIR program—

- (i) not later than 1 year after the date on which the applicable solicitation closes, if with respect to the National Institutes of Health or the National Science Foundation, or 90 days after the date on which the applicable solicitation closes, if with respect to any other participating agency; or
- (ii) if the Administrator authorizes an extension with respect to a solicitation, not later than 90 days after the date that would otherwise be applicable to the agency under clause (i):
- (5) subject to subsection (l), unilaterally select awardees for the SBIR funding agreements and inform each awardee under such an agreement, to the extent possible, of the expenses of

the awardee that will be allowable under the funding agreement;

(6) administer its own SBIR funding agreements (or delegate

such administration to another agency);

(7) make payments to recipients of SBIR funding agreements on the basis of progress toward or completion of the funding agreement requirements and, in all cases, make payment to recipients under such agreements in full, subject to audit, on or before the last day of the 12-month period beginning on the date of completion of such requirements;

(8) collect annually, and maintain in a common format in accordance with the simplified reporting requirements under subsection (v), such information from awardees as is necessary to assess the SBIR program, including information necessary to maintain the database described in subsection (k), includ-

ing—

(A) whether an awardee—

(i) has venture capital, hedge fund, or private equity firm investment or is majority-owned by multiple venture capital operating companies, hedge funds, or private equity firms and, if so—

(I) the amount of venture capital, hedge fund, or private equity firm investment that the awardee has received as of the date of the award; and

(II) the amount of additional capital that the awardee has invested in the SBIR technology;

(ii) has an investor that—

(I) is an individual who is not a citizen of the United States or a lawful permanent resident of the United States and, if so, the name of any such individual; or

(II) is a person that is not an individual and is not organized under the laws of a State or the United States and, if so, the name of any such person:

(iii) is owned by a woman or has a woman as a prin-

cipal investigator;

(iv) is owned by a socially or economically disadvantaged individual or has a socially or economically disadvantaged individual as a principal investigator;

- (v) is a faculty member or a student of an institution of higher education, as that term is defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001); or
- (vi) is located in a State described in subsection (u)(3);
- (B) a justification statement from the agency, if an awardee receives an award in an amount that is more than the award guidelines under this section; and

(C) data with respect to the Federal and State Tech-

nology Partnership Program (FAST Program);

(9) [make an annual report] not later than March 30 of each year, submit a report on the SBIR program to the Small Business Administration [and the Office of Science and Technology Policy], the Office of Science and Technology Policy, the Com-

mittee on Science, Space, and Technology and the Committee on Small Business of the House of Representatives, and the Committee on Small Business and Entrepreneurship of the Senate;

(10) include, as part of its annual performance plan as required by subsections (a) and (b) of section 1115 of title 31, United States Code, a section on its SBIR program, and shall submit such section to the Committee on Small Business of the Senate, and the Committee on Science and the Committee on Small Business of the House of Representatives;

(11) provide for and fully implement the tenets of Executive Order No. 13329 (Encouraging Innovation in Manufacturing);

and

(12) provide timely notice to the Administrator of any case or controversy before any Federal judicial or administrative tribunal concerning the SBIR program of the Federal agency.

(h) In addition to the requirements of subsection (f), each Federal agency which has a budget for research or research and development in excess of \$20,000,000 for any fiscal year beginning with fiscal year 1983 or subsequent fiscal year shall establish goals specifically for funding agreements for research or research and development to small business concerns, and no goal established under this subsection shall be less than the percentage of the agency's research or research and development budget expended under funding agreements with small business concerns in the immediately preceding fiscal year.

(i) ANNUAL REPORTING.—

(1) IN GENERAL.—Each Federal agency required by this section to have an SBIR program or to establish goals shall report annually to the Small Business Administration the number of awards (including awards under subsection (y)) pursuant to grants, contracts, or cooperative agreements over \$10,000 in amount and the dollar value of all such awards, identifying SBIR awards and comparing the number and amount of such awards with awards to other than small business concerns.

(2) CALCULATION OF EXTRAMURAL BUDGET.—

(A) METHODOLOGY.—Not later than 4 months after the date of the enactment of each appropriations Act for a Federal agency required by this section to have an SBIR program, the Federal agency shall submit to the Administrator a report, which shall include a description of the methodology used for calculating the amount of the extramural budget of that Federal agency.

(B) ADMINISTRATOR'S ANALYSIS.—The Administrator shall include an analysis of the methodology received from each Federal agency referred to in subparagraph (A) in the

report required by subsection (b)(7).

(j)(1) POLICY DIRECTIVES.—The Small Business Administration, after consultation with the Administrator of the Office of Federal Procurement Policy, the Director of the Office of Science and Technology Policy, and the Intergovernmental Affairs Division of the Office of Management and Budget, shall, within one hundred and twenty days of the enactment of the Small Business Innovation Development Act of 1982, issue policy directives for the general conduct of the SBIR programs within the Federal Government, including providing for—

(A) simplified, standardized, and timely SBIR solicitations;

(B) a simplified, standardized funding process which provides for (i) the timely receipt and review of proposals; (ii) outside peer review for at least Phase II proposals, if appropriate; (iii) protection of proprietary information provided in proposals; (iv) selection of awardees; (v) retention of rights in data generated in the performance of the contract by the small business concern; (vi) transfer of title to property provided by the agency to the small business concern if such a transfer would be more cost effective than recovery of the property by the agency; (vii) cost sharing; and (viii) cost principles and payment schedules;

(C) exemptions from the regulations under paragraph (2) if national security or intelligence functions clearly would be

jeopardized;

(D) minimizing regulatory burden associated with participation in the SBIR program for the small business concern which will stimulate the cost-effective conduct of Federal research and development and the likelihood of commercialization of the results of research and development conducted under the SBIR program;

(E) simplified, standardized, and timely annual report on the SBIR program to the Small Business Administration and the

Office of Science and Technology Policy;

(F) standardized and orderly withdrawal from program participation by an agency having a SBIR program; at the discretion of the Administration, such directives may require a phased withdrawal over a period of time sufficient in duration to minimize any adverse impact on small business concerns; and

(G) the voluntary participation in a SBIR program by a Federal agency not required to establish such a program pursuant

to subsection (f).

(2) Modifications.—Not later than 90 days after the date of enactment of the Small Business Research and Development Enhancement Act of 1992, the Administrator shall modify the policy directives issued pursuant to this subsection to provide for—

(A) retention by a small business concern of the rights to data generated by the concern in the performance of an

SBIR award for a period of not less than 4 years;

(B) continued use by a small business concern participating in Phase III of the SBIR program, as a directed bailment, of any property transferred by a Federal agency to the small business concern in Phase II of an SBIR program for a period of not less than 2 years, beginning on the initial date of the concern's participation in Phase III of such program;

(C) procedures to ensure, to the extent practicable, that an agency which intends to pursue research, development, or production of a technology developed by a small business concern under an SBIR program enters into follow-on, non-SBIR funding agreements with the small business concern for such research, development, or production;

(D) an increase to \$150,000 in the amount of funds which an agency may award in Phase I of an SBIR pro-

gram, and to \$1,000,000 in Phase II of an SBIR program, and an adjustment of such amounts every year for infla-

(E) a process for notifying the participating SBIR agencies and potential SBIR participants of the 1991, 1992, and

the current critical technologies, as identified-

(i) by the National Critical Technologies Panel (or its successor), in accordance with section 603 of the National Science and Technology Policy, Organization, and Priorities Act of 1976; or

(ii) by the Secretary of Defense, in accordance with section 2522 of title 10, United States Code;

(F) enhanced outreach efforts to increase the participation of socially and economically disadvantaged small business concerns, as defined in section 8(a)(4), and the participation of small businesses that are 51 percent owned and controlled by women in technological innovation and in SBIR programs, including Phase III of such programs, and the collection of data to document such participation;

(G) technical and programmatic guidance to encourage agencies to develop gap-funding programs to address the delay between an award for Phase I of an SBIR program and the application for and extension of an award for

Phase II of such program;

(H) procedures to ensure that a small business concern that submits a proposal for a funding agreement for Phase I of an SBIR program and that has received more than 15 Phase II SBIR awards during the preceding 5 fiscal years is able to demonstrate the extent to which it was able to secure Phase III funding to develop concepts resulting from previous Phase II SBIR awards; and

(I) procedures to ensure that agencies participating in the SBIR program retain the information submitted under subparagraph (H) at least until the General Accounting Office submits the report required under section 105 of the Small Business Research and Development Enhancement

Act of 1992.

(3) Additional modifications.—Not later than 120 days after the date of the enactment of the Small Business Innovation Research Program Reauthorization Act of 2000, the Administrator shall modify the policy directives issued pursuant to this subsection-

(A) to clarify that the rights provided for under paragraph (2)(A) apply to all Federal funding awards under this section, including Phase I, Phase II, and Phase III;

(B) to provide for the requirement of a succinct commercialization plan with each application for a Phase II award

that is moving toward commercialization;

(C) to require agencies to report to the Administration, not less frequently than annually, all instances in which an agency pursued research, development, or production of a technology developed by a small business concern using an award made under the SBIR program of that agency, and determined that it was not practicable to enter into a follow-on non-SBIR program funding agreement with the small business concern, which report shall include, at a

(i) the reasons why the follow-on funding agreement with the small business concern was not practicable;

(ii) the identity of the entity with which the agency contracted to perform the research, development, or production; and

(iii) a description of the type of funding agreement under which the research, development, or production was obtained; and

(D) to implement subsection (v), including establishing standardized procedures for the provision of information pursuant to subsection (k)(3).

(k) Database.-

(1) PUBLIC DATABASE.—Not later than 180 days after the date of the enactment of the Small Business Innovation Research Program Reauthorization Act of 2000, the Administrator shall develop, maintain, and make available to the public a searchable, up-to-date, electronic database that includes—

(A) the name, size, location, and an identifying number assigned by the Administrator, of each small business concern that has received a Phase I or Phase II SBIR or STTR

award from a Federal agency;

(B) a description of each Phase I or Phase II SBIR or STTR award received by that small business concern, including-

- (i) an abstract of the project funded by the award, excluding any proprietary information so identified by the small business concern;
 - (ii) the Federal agency making the award; and
 - (iii) the date and amount of the award;
- (C) an identification of any business concern or subsidiary established for the commercial application of a product or service for which an SBIR or STTR award is made;
- (D) information regarding mentors and Mentoring Networks, as required by section 35(d);
- (E) with respect to assistance under the STTR program only-
 - (i) whether the small business concern or the research institution initiated their collaboration on each assisted STTR project;

(ii) whether the small business concern or the research institution originated any technology relating to the assisted STTR project;

(iii) the length of time it took to negotiate any licensing agreement between the small business concern and the research institution under each assisted STTR project; and

(iv) how the proceeds from commercialization, marketing, or sale of technology resulting from each assisted STTR project were allocated (by percentage) between the small business concern and the research institution; and

(F) for each small business concern that has received a Phase I or Phase II SBIR or STTR award from a Federal

agency, whether the small business concern—

(i) has venture capital, hedge fund, or private equity firm investment and, if so, whether the small business concern is registered as majority-owned by multiple venture capital operating companies, hedge funds, or private equity firms as required under subsection (dd)(3):

(ii) is owned by a woman or has a woman as a prin-

cipal investigator;

(iii) is owned by a socially or economically disadvantaged individual or has a socially or economically disadvantaged individual as a principal investigator;

(iv) is owned by a faculty member or a student of an institution of higher education, as that term is defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001); or

(v) received assistance under the Federal and State Technology Partnership Program (FAST Program).

- (2) GOVERNMENT DATABASE.—Not later than 90 days after the date of enactment of the SBIR/STTR Reauthorization Act of 2011, the Administrator, in consultation with Federal agencies required to have an SBIR program pursuant to subsection (f)(1) or an STTR program pursuant to subsection (n)(1), shall develop and maintain a database to be used exclusively for SBIR and STTR program evaluation that—
 - (A) contains for each small business concern that applies for, submits a proposal for, or receives an award under Phase I or Phase II of the SBIR program or the STTR program—
 - (i) the name, size, and location of, and the identifying number assigned by the Administration to, the small business concern;
 - (ii) an abstract of the applicable project;

(iii) the specific aims of the project;

- (iv) the number of employees of the small business concern;
- (v) the names and titles of the key individuals that will carry out the project, the position each key individual holds in the small business concern, and contact information for each key individual;

(vi) the percentage of effort each individual described in clause (v) will contribute to the project;

(vii) whether the small business concern is majorityowned by multiple venture capital operating companies, hedge funds, or private equity firms; and

(viii) the Federal agency to which the application is made and contact information for the person or office within the Federal agency that is responsible for reviewing applications and making awards under the SBIR program or the STTR program;

(B) contains for each Phase II award made by a Federal agency—

(i) information collected in accordance with paragraph (3) on revenue from the sale of new products or services resulting from the research conducted under the award;

(ii) information collected in accordance with paragraph (3) on additional investment from any source, other than Phase I or Phase II SBIR or STTR awards, to further the research and development conducted under the award; and

(iii) any other information received in connection with the award that the Administrator, in conjunction with the SBIR and STTR program managers of Federal agencies, considers relevant and appropriate;

(C) includes any narrative information that a small business concern receiving a Phase II award voluntarily submits to further describe the outputs and outcomes of its awards;

(D) includes, for each awardee—

(i) the name, size, and location of, and any identifying number assigned by the Administrator to, the awardee;

(ii) whether the awardee has venture capital, hedge fund, or private equity firm investment and, if so—

(I) the amount of venture capital, hedge fund, or private equity firm investment as of the date of the award:

(II) the percentage of ownership of the awardee held by a venture capital operating company, hedge fund, or private equity firm, including whether the awardee is majority-owned by multiple venture capital operating companies, hedge funds, or private equity firms; and

(III) the amount of additional capital that the awardee has invested in the SBIR or STTR technology, which information shall be collected on an amount beginning.

annual basis;

(iii) the names and locations of any affiliates of the awardee;

(iv) the number of employees of the awardee;

(v) the number of employees of the affiliates of the awardee; and

(vi) the names of, and the percentage of ownership of the awardee held by—

(I) any individual who is not a citizen of the United States or a lawful permanent resident of the United States; or

(II) any person that is not an individual and is not organized under the laws of a State or the United States;

(E) includes any other data collected by or available to any Federal agency that such agency considers may be useful for SBIR or STTR program evaluation;

(F) is available for use solely for program evaluation purposes by the Federal Government or, in accordance with policy directives issued by the Administration, by other authorized persons who are subject to a use and nondisclosure agreement with the Federal Government covering the use of the database; and

(G) includes a timely and accurate list of any individual or small business concern that has participated in the

SBIR program or STTR program that has been-

(i) convicted of a fraud-related crime involving funding received under the SBIR program or STTR program; or

(ii) found civilly liable for a fraud-related violation involving funding received under the SBIR program or

STTR program.

(3) Updating information for database.—

- (A) IN GENERAL.—A small business concern applying for a Phase II award under this section shall be required to update information in the database established under this subsection for any prior Phase II award received by that small business concern. In complying with this paragraph, a small business concern may apportion sales or additional investment information relating to more than one Phase II award among those awards, if it notes the apportionment for each award.
- (B) Annual updates upon termination.—A small business concern receiving a Phase II award under this section shall—
 - (i) update information in the database concerning that award at the termination of the award period; and

(ii) be requested to voluntarily update such information annually thereafter for a period of 5 years.

(C) Government database.—Not later than 60 days after the date established by a Federal agency for submitting applications or proposals for a Phase I or Phase II award under the SBIR program or STTR program, the head of the Federal agency shall submit to the Administrator the data required under paragraph (2) with respect to each small business concern that applies or submits a proposal for the Phase I or Phase II award.

(4) PROTECTION OF INFORMATION.—Information provided under paragraph (2) shall be considered privileged and confidential and not subject to disclosure pursuant to section 552

of title 5, United States Code.

(5) RULE OF CONSTRUCTION.—Inclusion of information in the database under this subsection shall not be considered to be publication for purposes of subsection (a) or (b) of section 102 of title 35, United States Code.

(l) Reporting of Awards Made From Single Proposal, to Multiple Award Winners, or to Critical Technology Topics.—

(1) SINGLE PROPOSAL.—If a Federal agency required to establish an SBIR program under subsection (f) makes an award with respect to an SBIR solicitation topic or subtopic for which the agency received only 1 proposal, the agency shall provide written justification for making the award in its next quarterly

report to the Administration and in the agency's next annual

report required under subsection (g)(8).

(2) MULTIPLE AWARDS.—An agency referred to in paragraph (1) shall include in its next annual report required under subsection (g)(8) an accounting of the awards the agency has made for Phase I of an SBIR program during the reporting period to entities that have received more than 15 awards for the Phase II of an SBIR program during the preceding 5 fiscal years.

(3) CRITICAL TECHNOLOGY AWARDS.—An agency referred to in paragraph (1) shall include in its next annual report required under subsection (g)(8), an accounting of the number of awards it has made to critical technology topics, as defined in subsection (g)(3), including an identification of the specific critical technologies topics, and the percentage by number and dollar amount of the agency's total SBIR awards to such critical technology topics.

(m) TERMINATION.—The authorization to carry out the Small Business Innovation Research Program established under this sec-

tion shall terminate on September 30, 2022.

(n) REQUIRED EXPENDITURES FOR STTR BY FEDERAL AGENCIES.—
(1) REQUIRED EXPENDITURE AMOUNTS.—

(A) IN GENERAL.—With respect to each fiscal year through fiscal year 2022, each Federal agency that has an extramural budget for research, or research and development, in excess of \$1,000,000,000 for that fiscal year, shall expend with small business concerns not less than the percentage of that extramural budget specified in subparagraph (B), specifically in connection with STTR programs that meet the requirements of this section and any policy directives and regulations issued under this section.

(B) EXPENDITURE AMOUNTS.—The percentage of the extramural budget required to be expended by an agency in

accordance with subparagraph (A) shall be—

(i) 0.15 percent for each fiscal year through fiscal year 2003;

(ii) 0.3 percent for each of fiscal years 2004 through 2011:

(iii) 0.35 percent for each of fiscal years 2012 and 2013;

(iv) 0.40 percent for each of fiscal years 2014 and 2015; and

(v) 0.45 percent for fiscal year 2016 and each fiscal year thereafter.

(2) LIMITATIONS.—A Federal agency shall not—

(A) use any of its STTR budget established pursuant to paragraph (1) for the purpose of funding administrative costs of the program, including costs associated with salaries and expenses, or, in the case of a small business concern or a research institution, costs associated with salaries, expenses, and administrative overhead (other than those direct or indirect costs allowable under guidelines of the Office of Management and Budget and the governmentwide Federal Acquisition Regulation issued in accordance with section 25(c)(1) of the Office of Federal Procurement Policy Act); or

(B) make available for the purpose of meeting the requirements of paragraph (1) an amount of its extramural budget for basic research which exceeds the percentage

specified in paragraph (1).

(3) EXCLUSION OF CERTAIN FUNDING AGREEMENTS.—Funding agreements with small business concerns for research or research and development which result from competitive or single source selections other than an STTR program shall not be considered to meet any portion of the percentage requirements of paragraph (1).

(o) FEDERAL AGENCY STTR AUTHORITY.—Each Federal agency required to establish an STTR program in accordance with sub-

section (n) and regulations issued under this Act, shall—

(1) unilaterally determine categories of projects to be included in its STTR program;

(2) issue STTR solicitations in accordance with a schedule

determined cooperatively with the Administration;

(3) unilaterally determine research topics within the agency's STTR solicitations, giving special consideration to broad research topics and to topics that further 1 or more critical technologies, as identified—

(A) by the National Critical Technologies Panel (or its successor) in reports required under section 603 of the National Science and Technology Policy, Organization, and Priorities Act of 1976; or

(B) by the Secretary of Defense, in accordance with sec-

tion 2522 of title 10, United States Code;

(4)(A) unilaterally receive and evaluate proposals resulting from STTR solicitations; and

(B) make a final decision on each proposal submitted under

the STTR program-

(i) not later than 1 year after the date on which the applicable solicitation closes, if with respect to the National Institutes of Health or the National Science Foundation, or 90 days after the date on which the applicable solicitation closes, if with respect to any other participating agency; or

(ii) if the Administrator authorizes an extension for a solicitation, not later than 90 days after the date that would

be applicable to the agency under clause (i);

(5) unilaterally select awardees for its STTR funding agreements and inform each awardee under such an agreement, to the extent possible, of the expenses of the awardee that will be allowable under the funding agreement;

(6) administer its own STTR funding agreements (or delegate

such administration to another agency);

(7) make payments to recipients of STTR funding agreements on the basis of progress toward or completion of the funding agreement requirements and, in all cases, make payment to recipients under such agreements in full, subject to audit, on or before the last day of the 12-month period beginning on the date of the completion of such requirements;

(8) include, as part of its annual performance plan as required by subsections (a) and (b) of section 1115 of title 31, United States Code, a section on its STTR program, and shall submit such section to the Committee on Small Business of the

Senate, and the Committee on Science and the Committee on

Small Business of the House of Representatives;

(9) collect annually, and maintain in a common format in accordance with the simplified reporting requirements under subsection (v), such information from applicants and awardees as is necessary to assess the STTR program outputs and outcomes, including information necessary to maintain the database described in subsection (k), including-

(A) whether an applicant or awardee-

(i) has venture capital, hedge fund, or private equity firm investment or is majority-owned by multiple venture capital operating companies, hedge funds, or private equity firms and, if so-

(I) the amount of venture capital, hedge fund, or private equity firm investment that the applicant or awardee has received as of the date of the ap-

plication or award, as applicable; and

(II) the amount of additional capital that the applicant or awardee has invested in the STTR technology;

(ii) has an investor that-

(I) is an individual who is not a citizen of the United States or a lawful permanent resident of the United States and, if so, the name of any such individual; or

(II) is a person that is not an individual and is not organized under the laws of a State or the United States and, if so, the name of any such person;

(iii) is owned by a woman or has a woman as a prin-

cipal investigator:

(iv) is owned by a socially or economically disadvantaged individual or has a socially or economically disadvantaged individual as a principal investigator;

(v) is a faculty member or a student of an institution of higher education, as that term is defined in section 101 of the Higher Education Act of 1965 (20 U.S.C.

1001); or

(vi) is located in a State in which the total value of contracts awarded to small business concerns under all STTR programs is less than the total value of contracts awarded to small business concerns in a majority of other States, as determined by the Administrator in biennial fiscal years, beginning with fiscal year 2008, based on the most recent statistics compiled by the Administrator;

(B) if an awardee receives an award in an amount that is more than the award guidelines under this section, a statement from the agency that justifies the award

amount; and

(C) data with respect to the Federal and State Tech-

nology Partnership Program (FAST Program);

(10) submit an annual report on the STTR program to the Administration and the Office of Science and Technology Policy;

(11) adopt the agreement developed by the Administrator under subsection (w) as the agency's model agreement for allocating between small business concerns and research institutions intellectual property rights and rights, if any, to carry out

follow-on research, development, or commercialization;

(12) develop, in consultation with the Office of Federal Procurement Policy and the Office of Government Ethics, procedures to ensure that federally funded research and development centers (as defined in subsection (e)(8)) that participate in STTR agreements—

(A) are free from organizational conflicts of interests rel-

ative to the STTR program;

(B) do not use privileged information gained through work performed for an STTR agency or private access to STTR agency personnel in the development of an STTR proposal; and

(C) use outside peer review, as appropriate;

(13) not later than July 31, 1993, develop procedures for assessing the commercial merit and feasibility of STTR proposals, as evidenced by—

(A) the small business concern's record of successfully

commercializing STTR or other research;

(B) the existence of Phase II funding commitments from private sector or non-STTR funding sources;

(C) the existence of Phase III follow-on commitments for

the subject of the research; and

(D) the presence of other indicators of the commercial

potential of the idea;

(14) implement an outreach program to research institutions and small business concerns for the purpose of enhancing its STTR program, in conjunction with any such outreach done for purposes of the SBIR program;

(15) provide for and fully implement the tenets of Executive Order No. 13329 (Encouraging Innovation in Manufacturing);

and

(16) provide timely notice to the Administrator of any case or controversy before any Federal judicial or administrative tribunal concerning the STTR program of the Federal agency.

(p) STTR POLICY DIRECTIVE.—

- (1) ISSUANCE.—The Administrator shall issue a policy directive for the general conduct of the STTR programs within the Federal Government. Such policy directive shall be issued after consultation with—
 - (A) the heads of each of the Federal agencies required by subsection (n) to establish an STTR program;
 - (B) the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office; and
 - (C) the Director of the Office of Federal Procurement Policy.
- (2) CONTENTS.—The policy directive required by paragraph (1) shall provide for—

(A) simplified, standardized, and timely STTR solicitations;

- (B) a simplified, standardized funding process that provides for-
 - (i) the timely receipt and review of proposals;

(ii) outside peer review, if appropriate;

(iii) protection of proprietary information provided in proposals;

(iv) selection of awardees;

(v) retention by a small business concern of the rights to data generated by the concern in the performance of an STTR award for a period of not less than 4 years:

(vi) continued use by a small business concern, as a directed bailment, of any property transferred by a Federal agency to the small business concern in Phase II of the STTR program for a period of not less than 2 years, beginning on the initial date of the concern's participation in Phase III of such program;

(vii) cost sharing;

(viii) cost principles and payment schedules; and

(ix) 1-year awards for Phase I of an STTR program, generally not to exceed \$150,000, and 2-year awards for Phase II of an STTR program, generally not to exceed \$1,000,000, (each of which the Administrator shall adjust for inflation annually) greater or lesser amounts to be awarded at the discretion of the awarding agency, and shorter or longer periods of time to be approved at the discretion of the awarding agency where appropriate for a particular project;

(C) minimizing regulatory burdens associated with par-

ticipation in STTR programs;

(D) guidelines for a model agreement, to be used by all agencies, for allocating between small business concerns and research institutions intellectual property rights and rights, if any, to carry out follow-on research, development, or commercialization;

(E) procedures to ensure that—

(i) a recipient of an STTR award is a small business concern, as defined in section 3 and the regulations

promulgated thereunder; and

(ii) such small business concern exercises management and control of the performance of the STTR funding agreement pursuant to a business plan providing for the commercialization of the technology that is the subject matter of the award; and

(F) procedures to ensure, to the extent practicable, that an agency which intends to pursue research, development, or production of a technology developed by a small business concern under an STTR program enters into followon, non-STTR funding agreements with the small business concern for such research, development, or production.

(3) Modifications.—Not later than 120 days after the date of enactment of this paragraph, the Administrator shall modify the policy directive issued pursuant to this subsection to clarify that the rights provided for under paragraph (2)(B)(v) apply to all Federal funding awards under this section, including Phase I, Phase II, and Phase III.

(q) Discretionary Technical and Business Assistance.—

(1) In general.—Each Federal agency required by this section to conduct an SBIR program or STTR program may enter into an agreement with [a vendor selected under paragraph (2)] 1 or more vendors selected under paragraph (2)(A) to provide small business concerns engaged in SBIR or STTR projects with technical and business assistance services, such as access to a network of scientists and engineers engaged in a wide range of technologies, assistance with product sales, intellectual property protections, market research, market validation, and development of regulatory plans and manufacturing plans, or access to technical and business literature available through on-line data bases, for the purpose of assisting such concerns in—

(A) making better technical decisions concerning such projects:

(B) solving technical problems which arise during the conduct of such projects;

(C) minimizing technical risks associated with such projects; and

(D) developing and commercializing new commercial products and processes resulting from such projects, *including intellectual property protections*.

(2) VENDOR SELECTION.—[Each agency may select a vendor to assist small business concerns to meet]

(A) IN GENERAL.—Each agency may select 1 or more vendors from which small business concerns may obtain assistance in meeting the goals listed in paragraph (1) for a term not to exceed 5 years. Such selection shall be competitive and shall utilize merit-based criteria.

(B) SELECTION BY SMALL BUSINESS CONCERN.—A small business concern may, by contract or otherwise, select 1 or more vendors to assist the small business concern in meeting the goals listed in paragraph (1).

(3) Additional technical assistance.—

(A) PHASE I.—A Federal agency described in paragraph (1) may—

(i)provide to the recipient of a Phase I SBIR or STTR award, through a vendor selected under paragraph (2)(A), the services described in paragraph (1), in an amount equal to not more than [\$5,000 per year] \$6,500 per project; or

(ii) authorize the recipient of a Phase I SBIR or STTR award to purchase the services described in paragraph (1), in an amount equal to not more than [\$5,000 per year] \$6,500 per project, which shall be in addition to the amount of the recipient's award.

(B) PHASE II.—A Federal agency described in paragraph (1) may—

(i)provide to the recipient of a Phase II SBIR or STTR award, through a vendor selected under paragraph (2)(A), the services described in paragraph (1),

in an amount equal to not more than [\$5,000 per

year] *\$35,000 per project*; or

(ii) authorize the recipient of a Phase II SBIR or STTR award to purchase the services described in paragraph (1), in an amount equal to not more than [\$5,000 per year] \$35,000 per project, [which shall be in addition to the amount of the recipient's award] which may, as determined appropriate by the head of the agency, be included as part of the recipient's award or be in addition to the amount of the recipient's award award

(C) FLEXIBILITY.—In carrying out subparagraphs (A) and (B), each Federal agency shall provide the allowable amounts to a recipient that meets the eligibility requirements under the applicable subparagraph, if the recipient requests to seek technical or business assistance from an individual or entity other than [the vendor] a vendor selected under paragraph (2)(A) by the Federal agency. Business-related services may be obtained from an entity, such as a public or private organization or an agency of or other entity established or funded by a State, that facilitates or accelerates the commercialization of technologies or assists in the creation and growth of private enterprises that are commercializing technology.

(D) LIMITATION.—A Federal agency may not—

(i) use the amounts authorized under subparagraph (A) or (B) unless [the vendor] 1 or more vendors selected under paragraph (2)(A) [provides] provide the technical or business assistance to the recipient; or

(ii)enter a contract with a vendor under paragraph (2)(A) under which the amount provided for technical or business assistance is based on total number of

Phase I or Phase II awards.

(E) MULTIPLE AWARD RECIPIENTS.—The Administrator shall establish a limit on the amount of technical and business assistance services that may be received or purchased under subparagraph (B) by a small business concern that has received multiple Phase II SBIR or STTR awards for a fiscal year.

(r) Phase III Agreements.—

(1) IN GENERAL.—In the case of a small business concern that is awarded a funding agreement for Phase II of an SBIR or STTR program, a Federal agency may enter into a Phase III agreement with that business concern for additional work to be performed during or after the Phase II period. The Phase II funding agreement with the small business concern may, at the discretion of the agency awarding the agreement, set out the procedures applicable to Phase III agreements with that agency or any other agency.

(2) DEFINITION.—In this subsection, the term "Phase III agreement" means a follow-on, non-SBIR or non-STTR funded contract as described in paragraph (4)(C) or paragraph (6)(C)

of subsection (e).

(3) INTELLECTUAL PROPERTY RIGHTS.—Each funding agreement under an SBIR or STTR program shall include provisions

setting forth the respective rights of the United States and the small business concern with respect to intellectual property rights and with respect to any right to carry out follow-on research.

(4) Phase III awards.—To the greatest extent practicable, Federal agencies and Federal prime contractors shall issue Phase III awards relating to technology, including sole source awards, to the SBIR and STTR award recipients that developed the technology.

(s) COMPETITIVE SELECTION PROCEDURES FOR SBIR AND STTR PROGRAMS.—All funds awarded, appropriated, or otherwise made available in accordance with subsection (f) or (n) must be awarded pursuant to competitive and merit-based selection procedures.

(t) INCLUSION IN STRATEGIC PLANS.—Program information relating to the SBIR and STTR programs shall be included by each Federal agency in any update or revision required of the Federal agency under section 306(b) of title 5, United States Code.

(u) COORDINATION OF TECHNOLOGY DEVELOPMENT PROGRAMS.—

- (1) DEFINITION OF TECHNOLOGY DEVELOPMENT PROGRAM.—In this subsection, the term "technology development program" means—
 - (A) the Experimental Program to Stimulate Competitive Research of the National Science Foundation, as established under section 113 of the National Science Foundation Authorization Act of 1988 (42 U.S.C. 1862g);

(B) the Defense Experimental Program to Stimulate

Competitive Research of the Department of Defense;

(C) the Experimental Program to Stimulate Competitive Research of the Department of Energy;

(D) the Experimental Program to Stimulate Competitive

Research of the Environmental Protection Agency;

- (E) the Experimental Program to Stimulate Competitive Research of the National Aeronautics and Space Administration;
- (F) the Institutional Development Award Program of the National Institutes of Health; and

(G) the National Research Initiative Competitive Grants

Program of the Department of Agriculture.

(2) COORDINATION REQUIREMENTS.—Each Federal agency that is subject to subsection (f) and that has established a technology development program may, in each fiscal year, review for funding under that technology development program—

- (A) any proposal to provide outreach and assistance to one or more small business concerns interested in participating in the SBIR program, including any proposal to make a grant or loan to a company to pay a portion or all of the cost of developing an SBIR proposal, from an entity, organization, or individual located in—
 - (i) a State that is eligible to participate in that program: or

(ii) a State described in paragraph (3); or

(B) any proposal for Phase I of the SBIR program, if the proposal, though meritorious, is not funded through the SBIR program for that fiscal year due to funding restraints, from a small business concern located in—

(i) a State that is eligible to participate in a technology development program; or

(ii) a State described in paragraph (3).

(3) Additionally eligible state.—A State referred to in subparagraph (A)(ii) or (B)(ii) of paragraph (2) is a State in which the total value of contracts awarded to small business concerns under all SBIR programs is less than the total value of contracts awarded to small business concerns in a majority of other States, as determined by the Administrator in biennial fiscal years, beginning with fiscal year 2000, based on the most recent statistics compiled by the Administrator.

(v) REDUCING PAPERWORK AND COMPLIANCE BURDEN.—

(1) STANDARDIZATION OF REPORTING REQUIREMENTS.—The Administrator shall work with the Federal agencies required by this section to have an SBIR or STTR program to standardize reporting requirements for the collection of data from SBIR or STTR applicants and awardees, including data for inclusion in the database under subsection (k), taking into consideration the unique needs of each agency, and to the extent possible, permitting the updating of previously reported information by electronic means. Such requirements shall be de-

signed to minimize the burden on small businesses.

- (2) SIMPLIFICATION OF APPLICATION AND AWARD PROCESS.— Not later than 1 year after the date of enactment of this paragraph, and after a period of public comment, the Administrator shall issue regulations or guidelines, taking into consideration the unique needs of each Federal agency, to ensure that each Federal agency required to carry out an SBIR program or STTR program simplifies and standardizes the program proposal, selection, contracting, compliance, and audit procedures for the SBIR program or STTR program of the Federal agency (including procedures relating to overhead rates for applicants and documentation requirements) to reduce the paperwork and regulatory compliance burden on small business concerns applying to and participating in the SBIR program or STTR program.
- (w) STTR Model Agreement for Intellectual Property Rights.—
 - (1) IN GENERAL.—The Administrator shall promulgate regulations establishing a single model agreement for use in the STTR program that allocates between small business concerns and research institutions intellectual property rights and rights, if any, to carry out follow-on research, development, or commercialization.
 - (2) OPPORTUNITY FOR COMMENT.—In promulgating regulations under paragraph (1), the Administrator shall provide to affected agencies, small business concerns, research institutions, and other interested parties the opportunity to submit written comments.
 - (x) RESEARCH AND DEVELOPMENT FOCUS.—
 - (1) REVISION AND UPDATE OF CRITERIA AND PROCEDURES OF IDENTIFICATION.—In carrying out subsection (g), the Secretary of Defense shall, not less often than once every 4 years, revise and update the criteria and procedures utilized to identify areas of the research and development efforts of the Depart-

ment of Defense which are suitable for the provision of funds under the Small Business Innovation Research Program and the Small Business Technology Transfer Program.

the Small Business Technology Transfer Program.
(2) UTILIZATION OF PLANS.—The criteria and procedures described in paragraph (1) shall be developed through the use of

the most current versions of the following plans:

(A) The Joint Warfighting Science and Technology Plan required under section 270 of the National Defense Authorization Act for Fiscal Year 1997 (Public Law 104–201; 10 U.S.C. 2501 note).

(B) The Defense Technology Area Plan of the Depart-

ment of Defense.

- (C) The Basic Research Plan of the Department of Defense.
- (3) INPUT IN IDENTIFICATION OF AREAS OF EFFORT.—The criteria and procedures described in paragraph (1) shall include input in the identification of areas of research and development efforts described in that paragraph from Department of Defense program managers (PMs) and program executive officers (PEOs).
- (y) Commercialization Readiness Program.—
- (1) IN GENERAL.—The Secretary of Defense and the Secretary of each military department is authorized to create and administer a "Commercialization Readiness Program" to accelerate the transition of technologies, products, and services developed under the Small Business Innovation Research Program or Small Business Technology Transfer Program to Phase III, including the acquisition process. The authority to create and administer a Commercialization Readiness Program under this subsection may not be construed to eliminate or replace any other SBIR program or STTR program that enhances the insertion or transition of SBIR or STTR technologies, including any such program in effect on the date of enactment of the National Defense Authorization Act for Fiscal Year 2006 (Public Law 109–163; 119 Stat. 3136).
- (2) IDENTIFICATION OF RESEARCH PROGRAMS FOR ACCELERATED TRANSITION TO ACQUISITION PROCESS.—In carrying out the Commercialization Readiness Program, the Secretary of Defense and the Secretary of each military department shall identify research programs of the Small Business Innovation Research Program or Small Business Technology Transfer Program that have the potential for rapid transitioning to Phase III and into the acquisition process.
- (3) LIMITATION.—No research program may be identified under paragraph (2) unless the Secretary of the military department concerned certifies in writing that the successful transition of the program to Phase III and into the acquisition process is expected to meet high priority military requirements of such military department.

(4) Funding.—

(A) IN GENERAL.—The Secretary of Defense and each Secretary of a military department may use not more than an amount equal to 1 percent of the funds available to the Department of Defense or the military department pursuant to the Small Business Innovation Research Program

for payment of expenses incurred to administer the Commercialization Readiness Program under this subsection.

(B) LIMITATIONS.—The funds described in subparagraph A)—

(i) shall not be subject to the limitations on the use of funds in subsection (f)(2); and

(ii) shall not be used to make Phase III awards.

(5) INSERTION INCENTIVES.—For any contract with a value of not less than \$100,000,000, the Secretary of Defense [is authorized to] shall—

(A) establish goals for the transition of Phase III tech-

nologies in subcontracting plans; and

(B) require a prime contractor on such a contract to report the number and dollar amount of contracts entered into by that prime contractor for Phase III SBIR or STTR projects.

(6) GOAL FOR SBIR AND STTR TECHNOLOGY INSERTION.—The

Secretary of Defense shall—

(A) set a goal to increase the number of Phase II SBIR contracts and the number of Phase II STTR contracts awarded by the Secretary that lead to technology transition into programs of record or fielded systems;

(B) use incentives in effect on the date of enactment of the SBIR/STTR Reauthorization Act of 2011, or create new incentives, to encourage agency program managers and prime contractors to meet the goal under subparagraph (A); [and]

(C) submit to the Administrator for inclusion in the an-

nual report under subsection (b)(7)—

(i) the number and percentage of Phase II SBIR and STTR contracts awarded by the Secretary that led to technology transition into programs of record or fielded systems;

(ii) information on the status of each project that received funding through the Commercialization Readiness Program and efforts to transition those projects

into programs of record or fielded systems; and

(iii) a description of each incentive that has been used by the Secretary under subparagraph (B) and the effectiveness of that incentive with respect to meeting

the goal under subparagraph (A)[.]; and

(D) not later than 120 days after the date of the enactment of this subparagraph, and not later than December 31 of each year thereafter, submit to the Committee on Science, Space, and Technology and the Committee on Small Business of the House of Representatives, and to the Committee on Small Business and Entrepreneurship of the Senate, a report describing the goals set under subparagraph (A) and the incentives used or created under subparagraph (B).

(z) Encouraging Innovation in Energy Efficiency.—

(1) FEDERAL AGENCY ENERGY-RELATED PRIORITY.—In carrying out its duties under this section relating to SBIR and STTR solicitations by Federal departments and agencies, the Administrator shall—

(A) ensure that such departments and agencies give high priority to small business concerns that participate in or conduct energy efficiency or renewable energy system research and development projects; and

(B) include in the annual report to Congress under subsection (b)(7) a determination of whether the priority de-

scribed in subparagraph (A) is being carried out.

(2) CONSULTATION REQUIRED.—The Administrator shall consult with the heads of other Federal departments and agencies in determining whether priority has been given to small business concerns that participate in or conduct energy efficiency or renewable energy system research and development projects, as required by this subsection.

(3) GUIDELINES.—The Administrator shall, as soon as is practicable after the date of enactment of this subsection, issue guidelines and directives to assist Federal agencies in meeting

the requirements of this subsection.

(4) Definitions.—In this subsection—

(A) the term "biomass"—

(i) means any organic material that is available on a renewable or recurring basis, including—

(I) agricultural crops;

- (II) trees grown for energy production; (III) wood waste and wood residues;
- (IV) plants (including aquatic plants and grasses);

(V) residues;

(VI) fibers;

- (VII) animal wastes and other waste materials; and
- (VIII) fats, oils, and greases (including recycled fats, oils, and greases); and

(ii) does not include—

(I) paper that is commonly recycled; or

(II) unsegregated solid waste;

(B) the term "energy efficiency project" means the installation or upgrading of equipment that results in a significant reduction in energy usage; and

(C) the term "renewable energy system" means a system

of energy derived from—

(i) a wind, solar, biomass (including biodiesel), or geothermal source; or

(ii) hydrogen derived from biomass or water using an energy source described in clause (i).

(aa) LIMITATION ON SIZE OF AWARDS.—

(1) LIMITATION.—No Federal agency may issue an award under the SBIR program or the STTR program if the size of the award exceeds the award guidelines established under this section by more than 50 percent.

(2) MAINTENANCE OF INFORMATION.—Participating agencies shall maintain information on awards exceeding the guidelines

established under this section, including-

(A) the amount of each award;

(B) a justification for exceeding the guidelines for each award;

(C) the identity and location of each award recipient; and

(D) whether an award recipient has received any venture capital, hedge fund, or private equity firm investment and, if so, whether the recipient is majority-owned by multiple venture capital operating companies, hedge funds, or private equity firms.

(3) REPORTS.—The Administrator shall include the information described in paragraph (2) in the annual report of the Ad-

ministrator to Congress.

(4) WAIVER FOR SPECIFIC TOPIC.—Upon the receipt of an application from a Federal agency, the Administrator may grant a waiver from the requirement under paragraph (1) with respect to a specific topic (but not for the agency as a whole) for a fiscal year if the Administrator determines, based on the information contained in the application from the agency, that—

(A) the requirement under paragraph (1) will interfere with the ability of the agency to fulfill its research mission through the SBIR program or the STTR program; and

(B) the agency will minimize, to the maximum extent possible, the number of awards that do not satisfy the requirement under paragraph (1) to preserve the nature and intent of the SBIR program and the STTR program.

(5) RULE OF CONSTRUCTION.—Nothing in this subsection shall be construed to prevent a Federal agency from supplementing an award under the SBIR program or the STTR program using funds of the Federal agency that are not part of the SBIR program or the STTR program of the Federal agency.

(bb) Subsequent Phase II Awards.—

- (1) AGENCY FLEXIBILITY.—A small business concern that received a Phase I award from a Federal agency under this section shall be eligible to receive a subsequent Phase II award from another Federal agency, if the head of each relevant Federal agency or the relevant component of the Federal agency makes a written determination that the topics of the relevant awards are the same and both agencies report the awards to the Administrator for inclusion in the public database under subsection (k).
- (2) SBIR AND STTR PROGRAM FLEXIBILITY.—A small business concern that received a Phase I award under this section under the SBIR program or the STTR program may receive a subsequent Phase II award in either the SBIR program or the STTR program and the participating agency or agencies shall report the awards to the Administrator for inclusion in the public database under subsection (k).

(3) PREVENTING DUPLICATIVE AWARDS.—The head of a Federal agency shall verify that any activity to be performed with respect to a project with a Phase I or Phase II SBIR or STTR award has not been funded under the SBIR program or STTR

program of another Federal agency.

(cc) Phase Flexibility.—[During fiscal years 2012 through 2017, the National Institutes of Health, the Department of Defense, and the Department of Education may each provide] During fiscal years 2018 through 2022, all agencies participating in the

SBIR program may provide to a small business concern an award under Phase II of the SBIR program with respect to a project, without regard to whether the small business concern was provided an award under Phase I of an SBIR program with respect to such project, if the head of the applicable agency determines that the small business concern has completed the determinations described in subsection (e)(4)(A) with respect to such project despite not having been provided a Phase I award.

(dd) Participation of Small Business Concerns Majority-Owned by Venture Capital Operating Companies, Hedge

Funds, or Private Equity Firms in the SBIR Program.—

(1) AUTHORITY.—Upon providing a written determination described in paragraph (2) to the Administrator, the Committee on Small Business and Entrepreneurship of the Senate, and the Committee on Small Business and the Committee on Science, Space, and Technology of the House of Representatives, not later than 30 days before the date on which any such award is made—

(A) the Director of the National Institutes of Health, the Secretary of Energy, and the Director of the National Science Foundation may award not more than 25 percent of the funds allocated for the SBIR program of the applicable Federal agency to small business concerns that are owned in majority part by multiple venture capital operating companies, hedge funds, or private equity firms through competitive, merit-based procedures that are open

to all eligible small business concerns; and

(B) the head of a Federal agency other than a Federal agency described in subparagraph (A) that participates in the SBIR program may award not more than 15 percent of the funds allocated for the SBIR program of the Federal agency to small business concerns that are owned in majority part by multiple venture capital operating companies, hedge funds, or private equity firms through competitive, merit-based procedures that are open to all eligible small business concerns.

(2) Determination.—A written determination described in this paragraph is a written determination by the head of a Federal agency that explains how the use of the authority under paragraph (1) will—

(A) induce additional venture capital, hedge fund, or private equity firm funding of small business innovations;

(B) substantially contribute to the mission of the Federal agency;

(C) demonstrate a need for public research; and

(D) otherwise fulfill the capital needs of small business concerns for additional financing for SBIR projects.

(3) REGISTRATION.—A small business concern that is majority-owned by multiple venture capital operating companies, hedge funds, or private equity firms and qualified for participation in the program authorized under paragraph (1) shall—

(A) register with the Administrator on the date that the small business concern submits an application for an

award under the SBIR program; and

(B) indicate in any SBIR proposal that the small business concern is registered under subparagraph (A) as majority-owned by multiple venture capital operating companies, hedge funds, or private equity firms.

(4) Compliance.—

(A) IN GENERAL.—The head of a Federal agency that makes an award under this subsection during a fiscal year shall collect and submit to the Administrator data relating to the number and dollar amount of Phase I awards, Phase II awards, and any other category of awards by the Federal agency under the SBIR program during that fiscal year.

(B) ANNUAL REPORTING.—The Administrator shall include as part of each annual report by the Administration under subsection (b)(7) any data submitted under subparagraph (A) and a discussion of the compliance of each Federal agency that makes an award under this subsection during the fiscal year with the maximum percentages

under paragraph (1).

(5) Enforcement.—If a Federal agency awards more than the percent of the funds allocated for the SBIR program of the Federal agency authorized under paragraph (1) for a purpose described in paragraph (1), the head of the Federal agency shall transfer an amount equal to the amount awarded in excess of the amount authorized under paragraph (1) to the funds for general SBIR programs from the non-SBIR and non-STTR research and development funds of the Federal agency not later than 180 days after the date on which the Federal agency made the award that caused the total awarded under paragraph (1) to be more than the amount authorized under paragraph (1) for a purpose described in paragraph (1).

(6) Final decisions on applications under the sbir pro-

GRAM.-

- (A) DEFINITION.—In this paragraph, the term "covered small business concern" means a small business concern that—
 - (i) was not majority-owned by multiple venture capital operating companies, hedge funds, or private equity firms on the date on which the small business concern submitted an application in response to a solicitation under the SBIR programs; and

(ii) on the date of the award under the SBIR program is majority-owned by multiple venture capital operating companies, hedge funds, or private equity

firms.

- (B) IN GENERAL.—If a Federal agency does not make an award under a solicitation under the SBIR program before the date that is 9 months after the date on which the period for submitting applications under the solicitation ends—
 - (i) a covered small business concern is eligible to receive the award, without regard to whether the covered small business concern meets the requirements for receiving an award under the SBIR program for a small business concern that is majority-owned by mul-

tiple venture capital operating companies, hedge funds, or private equity firms, if the covered small business concern meets all other requirements for

such an award; and

(ii) the head of the Federal agency shall transfer an amount equal to any amount awarded to a covered small business concern under the solicitation to the funds for general SBIR programs from the non-SBIR and non-STTR research and development funds of the Federal agency, not later than 90 days after the date on which the Federal agency makes the award.

(7) EVALUATION CRITERIA.—A Federal agency may not use investment of venture capital or investment from hedge funds or private equity firms as a criterion for the award of contracts

under the SBIR program or STTR program.

(ee) Collaborating With Federal Laboratories and Re-SEARCH AND DEVELOPMENT CENTERS.—

- (1) AUTHORIZATION.—Subject to the limitations under this section, the head of each participating Federal agency may make SBIR and STTR awards to any eligible small business concern that-
 - (A) intends to enter into an agreement with a Federal laboratory or federally funded research and development center for portions of the activities to be performed under that award; or
 - (B) has entered into a cooperative research and development agreement (as defined in section 12(d) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(d))) with a Federal laboratory.

(2) Prohibition.—No Federal agency shall—

- (A) condition an SBIR or STTR award upon entering into agreement with any Federal laboratory or any federally funded laboratory or research and development center for any portion of the activities to be performed under that award;
- (B) approve an agreement between a small business concern receiving an SBIR or STTR award and a Federal laboratory or federally funded laboratory or research and development center, if the small business concern performs a lesser portion of the activities to be performed under that award than required by this section and by the SBIR Policy Directive and the STTR Policy Directive of the Administrator; or

(C) approve an agreement that violates any provision, including any data rights protections provision, of this section or the SBIR and the STTR Policy Directives.

(3) IMPLEMENTATION.—Not later than 180 days after the date of enactment of this subsection, the Administrator shall modify the SBIR Policy Directive and the STTR Policy Directive issued under this section to ensure that small business concerns

(A) have the flexibility to use the resources of the Federal laboratories or federally funded research and development centers; and

- (B) are not mandated to enter into agreement with any Federal laboratory or any federally funded laboratory or research and development center as a condition of an award.
- (4) ADVANCE PAYMENT.—If a small business concern receiving an award under this section enters into an agreement with a Federal laboratory or federally funded research and development center for portions of the activities to be performed under that award, the Federal laboratory or federally funded research and development center may not require advance payment from the small business concern in an amount greater than the amount necessary to pay for 30 days of such activities.

(ff) ADDITIONAL SBIR AND STTR AWARDS.—

(1) EXPRESS AUTHORITY FOR AWARDING A SEQUENTIAL PHASE II AWARD.—A small business concern that receives a Phase II SBIR award or a Phase II STTR award for a project remains eligible to receive 1 additional Phase II SBIR award or Phase II STTR award for continued work on that project

II STTR award for continued work on that project.
(2) PREVENTING DUPLICATIVE AWARDS.—The head of a Federal agency shall verify that any activity to be performed with respect to a project with a Phase I or Phase II SBIR or STTR award has not been funded under the SBIR program or STTR

program of another Federal agency.

(gg) [Pilot Program.—] Civilian Agency Commercialization Readiness Program.—

(1) AUTHORIZATION.—The head of each covered Federal agency may allocate not more than 10 percent of the funds allocated to the SBIR program and the STTR program of the covered Federal agency to establish a Civilian Agency Commercialization Readiness Program for civilian agencies—

(A) for awards for technology development, testing, evaluation, and commercialization assistance for SBIR and

STTR Phase II technologies; or

(B) to support the progress of research, research and development, and commercialization conducted under the SBIR or STTR programs to Phase III.

(2) APPLICATION BY FEDERAL AGENCY.—

- (A) IN GENERAL.—A covered Federal agency may not [establish a pilot program] establish a Civilian Agency Commercialization Readiness Program under this subsection unless the covered Federal agency makes a written application to the Administrator, not later than 90 days before the first day of the fiscal year in which [the pilot program] such Civilian Agency Commercialization Readiness Program is to be established, that describes a compelling reason that additional investment in SBIR or STTR technologies is necessary, including unusually high regulatory, systems integration, or other costs relating to development or manufacturing of identifiable, highly promising small business technologies or a class of such technologies expected to substantially advance the mission of the agency.
 - (B) DETERMINATION.—The Administrator shall—

 (i) make a determination regarding an application submitted under subparagraph (A) not later than 30

days before the first day of the fiscal year for which the application is submitted;

(ii) publish the determination in the Federal Reg-

ister; and

(iii) make a copy of the determination and any related materials available to the Committee on Small Business and Entrepreneurship of the Senate and the Committee on Small Business and the Committee on Science, Space, and Technology of the House of Representatives.

(3) MAXIMUM AMOUNT OF AWARD.—The head of a covered Federal agency may not make an award under [a pilot program a Civilian Commercialization Readiness Program in excess of 3 times the dollar amounts generally established for Phase II awards under subsection (j)(2)(D) or (p)(2)(B)(ix).

(4) REGISTRATION.—Any applicant that receives an award under [a pilot program] a Civilian Commercialization Readiness Program shall register with the Administrator in a reg-

istry that is available to the public.

(5) AWARD CRITERIA OR CONSIDERATION.—When making an award under this section, the head of a covered Federal agency shall give consideration to whether the technology to be supported by the award is likely to be manufactured in the United States.

(6) Report.—The head of each covered Federal agency shall include in the annual report of the covered Federal agency to the Administrator an analysis of the various activities considered for inclusion in [the pilot program] a Civilian Agency Commercialization Readiness Program of the covered Federal agency and a statement of the reasons why each activity considered was included or not included, as the case may be.

[(7) TERMINATION.—The authority to establish a pilot pro-

gram under this section expires at the end of fiscal year 2017.]

[(8)] (7) DEFINITIONS.—In this subsection— (A) the term "covered Federal agency"—

(i) means a Federal agency participating in the

SBIR program or the STTR program; and

(ii) does not include the Department of Defense; and [(B) the term "pilot program" means each program es-

tablished under paragraph (1).]
(B) the term "Civilian Agency Commercialization Readiness Program" means each program established under

paragraph (1).

(hh) TIMING OF RELEASE OF FUNDING.—Federal agencies participating in the SBIR program or STTR program shall, to the extent possible, attempt to shorten the amount of time between the provision of notice of an award under the SBIR program or STTR program and the subsequent release of funding with respect to the

(ii) REPORTING ON TIMING.—Federal agencies participating in the SBIR program or STTR program shall provide to the Administrator, for the annual report on the SBIR and STTR program under subsection (b)(7), the average amount of time the agency takes to make a final decision on proposals submitted under such programs, the average amount of time the agency takes to release funding with respect to an award under such programs, and the goals established to reduce such amounts.

[(jj) Phase 0 Proof of Concept Partnership Pilot Pro-

GRAM.

(1) IN GENERAL.—The Director of the National Institutes of Health may use \$5,000,000 of the funds allocated under subsection (n)(1) for a Proof of Concept Partnership pilot program to accelerate the creation of small businesses and the commercialization of research innovations from qualifying institutions. To implement this program, the Director shall award, through a competitive, merit-based process, grants to qualifying institutions. These grants shall only be used to administer Proof of Concept Partnership awards in conformity with this subsection.

(2) Definitions.—In this subsection—

[(A) the term "Director" means the Director of the National Institutes of Health;

[(B) the term "pilot program" refers to the Proof of Con-

cept Partnership pilot program; and [(C) the terms "qualifying institution" and "institution" mean a university or other research institution that participates in the National Institutes of Health's STTR program.

(3) Proof of concept partnerships.—

(A) IN GENERAL.—A Proof of Concept Partnership shall be set up by a qualifying institution to award grants to individual researchers. These grants should provide researchers with the initial investment and the resources to support the proof of concept work and commercialization mentoring needed to translate promising research projects and technologies into a viable company. This work may include technical validations, market research, clarifying intellectual property rights position and strategy, and investigating commercial or business opportunities.

(B) AWARD GUIDELINES.—The administrator of a Proof of Concept Partnership program shall award grants in ac-

cordance with the following guidelines:

(i) The Proof of Concept Partnership shall use a market-focused project management oversight process,

[(I) a rigorous, diverse review board comprised of local experts in translational and proof of concept research, including industry, start-up, venture capital, technical, financial, and business experts and university technology transfer officials;

[(II) technology validation milestones focused on

market feasibility;

[(III) simple reporting effective at redirecting

projects; and

(IV) the willingness to reallocate funding from failing projects to those with more potential.

[(ii) Not more than \$100,000 shall be awarded to-

wards an individual proposal.

(C) EDUCATIONAL RESOURCES AND GUIDANCE.—The administrator of a Proof of Concept Partnership program shall make educational resources and guidance available to researchers attempting to commercialize their innovations.

(4) AWARDS.—

[(A) Size of award.—The Director may make awards to a qualifying institution for up to \$1,000,000 per year for

up to 3 years.

- (B) AWARD CRITERIA.—In determining which qualifying institutions receive pilot program grants, the Director shall consider, in addition to any other criteria the Director determines necessary, the extent to which qualifying institutions-
 - (i) have an established and proven technology transfer or commercialization office and have a plan for engaging that office in the program's implementa-

(ii) have demonstrated a commitment to local and regional economic development;

(iii) are located in diverse geographies and are of

diverse sizes:

- (iv) can assemble project management boards comprised of industry, start-up, venture capital, technical, financial, and business experts;
- (v) have an intellectual property rights strategy or office; and
- [(vi) demonstrate a plan for sustainability beyond the duration of the funding award.
- [(5) LIMITATIONS.—The funds for the pilot program shall not be used-
 - (A) for basic research, but to evaluate the commercial potential of existing discoveries, including—

[(i) proof of concept research or prototype development; and

(ii) activities that contribute to determining a project's commercialization path, to include technical validations, market research, clarifying intellectual property rights, and investigating commercial and business opportunities; or

(B) to fund the acquisition of research equipment or supplies unrelated to commercialization activities.

[(6) EVALUATIVE REPORT.—The Director shall submit to the Committee on Science, Space, and Technology and the Committee on Small Business of the House of Representatives and the Committee on Small Business and Entrepreneurship of the Senate an evaluative report regarding the activities of the pilot program. The report shall include-

((A) a detailed description of the institutional and proposal selection process:

[(B) an accounting of the funds used in the pilot pro-

((C) a detailed description of the pilot program, including incentives and activities undertaken by review board

(D) a detailed compilation of results achieved by the pilot program, including the number of small business concerns included and the number of business packages developed, and the number of projects that progressed into subsequent STTR phases; and

(E) an analysis of the program's effectiveness with sup-

porting data.

[(7) SUNSET.—The pilot program under this subsection shall terminate at the end of fiscal year 2017.]

(jj) Innovative Approaches to Technology Transfer.—

(1) Grant Program.—

(A) In General.—Each Federal agency required by subsection (n) to establish an STTR program shall carry out an Innovative Approaches to Technology Transfer Grant Program (hereinafter referred to as a "Program") to support innovative approaches to technology transfer at institutions of higher education (as defined in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)), nonprofit research institutions, and Federal laboratories in order to accelerate the commercialization of federally funded research and technology by small business concerns, including new businesses.

(B) Awarding of grants to qualifying institutions.—

(i) In General.—Each Federal agency described in subparagraph (A) shall provide grants, through a competitive, merit-based process, in the amounts listed in subparagraph (C)(i) to institutions of higher education, technology transfer organizations that facilitate the commercialization of technologies developed by one or more such institutions of higher education, Federal laboratories, other public and private nonprofit entities, and consortia thereof, for initiatives that help identify high-quality, commercially viable federally funded research and technologies and to facilitate and accelerate their transfer into the marketplace.

(ii) Selection process and applications.—Qualifying institutions seeking a grant under this subsection shall submit an application to a Federal agency described in subparagraph (A) at such time, in such manner, and containing such information as the agency may require. The application shall include, at a minimum—

(I) a description of innovative approaches to technology transfer, technology development, and commercial readiness that have the potential to increase or accelerate technology transfer outcomes and can be adopted by other qualifying institutions, or a demonstration of proven technology transfer and commercialization strategies, or a plan to implement proven technology transfer and commercialization strategies, that can achieve greater commercialization of federally funded research and technologies with Program funding;

(II) a description of how the qualifying institution will contribute to local and regional economic

development efforts; and

(III) a plan for sustainability beyond the duration of the funding award.

(iii) Use of funds.—Activities supported by grants

under this subsection may include—

(I) providing early-stage proof of concept funding

for translational research;

(II) identifying research and technologies at recipient institutions that have the potential for accelerated commercialization;

(III) technology maturation funding to support activities such as prototype construction, experiment analysis, product comparison, and collecting performance data;

(IV) technical validations, market research, clarifying intellectual property rights position and strategy, and investigating commercial and busi-

ness opportunities; and

(V) programs to provide advice, mentoring, entrepreneurial education, project management, and technology and business development expertise to innovators and recipients of technology transfer licenses to maximize commercialization potential.

(iv) Program oversight board.—

(I) IN GENERAL.—Successful applications required under clause (ii) shall include a plan to assemble a Program Oversight Board, the members of which shall have technical, scientific, or business expertise and shall be drawn from industry, start-up companies, venture capital, technical enterprises, financial institutions, and business development organizations.

(II) PROJECT AWARDS.—A Program Oversight

Board shall—

(aa) establish award programs for individual projects;

(bb) provide rigorous evaluation of project

applications;

(cc) determine which projects should receive awards, in accordance with guidelines established by the Board;

(dd) establish milestones and associated award amounts for projects that reach milestones;

(ee) determine whether awarded projects are

reaching milestones; and

(ff) develop a process to reallocate outstanding award amounts from projects that are not reaching milestones to other projects with more potential.

(C) GRANT AND AWARD AMOUNTS.—

(i) GRANT AMOUNTS.—Each Federal agency described in subparagraph (A) may make grants under subparagraph (B) to qualifying institutions for up to \$1,000,000 per year for up to 3 years.

(ii) AWARD AMOUNTS.—Each qualifying institution that receives a grant under subparagraph (B) shall provide awards for individual projects of not more than \$150,000, to be provided in phased amounts, based on reaching the milestones established by the qualifying institution's Program Oversight Board.

(D) AUTHORIZED EXPENDITURES FOR THE PROGRAM.

(i) Percentage.—The percentage of the extramural budget that each Federal agency described under subparagraph (A) expends on a Program shall be-

(I) 0.05 percent for each of fiscal years 2018 and

2019; and

(II) 0.1 percent for each of fiscal years 2020 and 2021.

(ii) Treatment of expenditures.—Any portion of the extramural budget expended by a Federal agency on a Program shall apply towards the agency's expenditure requirements under subsection (n).

(2) Program evaluation and data collection and dis-

SEMINATION.

(A) EVALUATION PLAN AND DATA COLLECTION.—Each Federal agency required by paragraph (1)(A) to establish a Program shall develop a program evaluation plan and collect, annually, such information from grantees as is necessary to assess the Program. Program evaluation plans shall require the collection of data aimed at identifying outcomes resulting from the transfer of technology with assistance from the Program, such as-

(i) specific follow-on funding identified or obtained, including follow-on funding sources, such as Federal

sources or private sources;

(ii) the number of projects which result in a license to a start-up company or an established company with sufficient resources for effective commercialization within 5 years of receiving an award under paragraph (1)(C)(ii);

(iii) invention disclosures and patents;

(iv) the number of projects supported by qualifying institutions receiving a grant under paragraph (1)(C)(i)that secure Phase I or Phase II SBIR or STTR awards;

(v) available information on revenue, sales, or other measures of products that have been commercialized as a result of projects awarded under paragraph (1)(C)(ii);

(vi) the number and location of jobs created resulting from projects awarded under paragraph (1)(C)(ii); and (vii) other data as considered appropriate by a Federal agency required by this subparagraph to develop

a program evaluation plan.

(B) Evaluative report to congress.—The head of each Federal agency that has a Program shall submit to the Committee on Science, Space, and Technology and the Committee on Small Business of the House of Representatives and the Committee on Small Business and Entrepreneurship of the Senate an evaluative report regarding the activities of the Program. The report shall include—

(i) a detailed description of the implementation of the Program;

(ii) a detailed description of the grantee selection

process;

(iii) an accounting of the funds used in the Program;

(iv) a summary of the data collected under subpara-

graph (A).

(C) DATA DISSEMINATION.—For purposes of Program transparency and dissemination of best practices, the Administrator shall include, on the public database under subsection (k)(1), information on the Program, including—

(i) the program evaluation plan required under sub-

paragraph(A);

(ii) a list of recipients of awards under paragraph (1)(C)(ii); and

(iii) information on the use of grants under para-

graph (1)(C)(i) by recipient institutions.

- (kk) Phase III Reporting.—The annual SBIR or STTR report to Congress by the Administration under subsection (b)(7) shall include, for each Phase III award—
 - (1) the name of the agency or component of the agency or the non-Federal source of capital making the Phase III award;
 - (2) the name of the small business concern or individual receiving the Phase III award; and

(3) the dollar amount of the Phase III award.

- (ll) Consent To Release Contact Information to Organiza-TIONS.-
 - (1) Enabling concern to give consent.—Each Federal agency required by this section to conduct an SBIR program or an STTR program shall enable a small business concern that is an SBIR applicant or an STTR applicant to indicate to the Federal agency whether the Federal agency has the consent of the concern to-
 - (A) identify the concern to appropriate local and Statelevel economic development organizations as an SBIR applicant or an STTR applicant; and

(B) release the contact information of the concern to

such organizations.

(2) RULES.—The Administrator shall establish rules to implement this subsection. The rules shall include a requirement that a Federal agency include in the SBIR and STTR application a provision through which the applicant can indicate consent for purposes of paragraph (1).

(mm) Assistance for Administrative, Oversight, and Con-TRACT PROCESSING COSTS.

(1) IN GENERAL.—Subject to paragraph (3) and until [September 30, 2017] September 30, 2022, the Administrator shall allow each Federal agency required to conduct an SBIR program to use not more than 3 percent of the funds allocated to the SBIR program of the Federal agency for-

(A) the administration of the SBIR program or the STTR

program of the Federal agency:

(B) the provision of outreach and technical assistance relating to the SBIR program or STTR program of the Federal agency, including technical assistance site visits, personnel interviews, and national conferences;

- (C) the implementation of commercialization and outreach initiatives that were not in effect on the date of enactment of this subsection;
 - (D) carrying out the program under subsection (y);
- (E) activities relating to oversight and congressional reporting, including waste, fraud, and abuse prevention activities;
- (F) targeted reviews of recipients of awards under the SBIR program or STTR program of the Federal agency that the head of the Federal agency determines are at high risk for fraud, waste, or abuse to ensure compliance with requirements of the SBIR program or STTR program, respectively;
- (G) the implementation of oversight and quality control measures, including verification of reports and invoices and cost reviews;

(H) carrying out subsection (dd);

(I) contract processing costs relating to the SBIR program or STTR program of the Federal agency; and

(J) funding for additional personnel and assistance with

application reviews.

(2) Outreach and technical assistance.—

(A) IN GENERAL.—Except as provided in subparagraph (B), a Federal agency participating in the program under this subsection shall use a portion of the funds authorized for uses under paragraph (1) to carry out the policy directive required under subsection (j)(2)(F) and to increase the participation of States with respect to which a low level of SBIR awards have historically been awarded.

(B) WAIVER.—A Federal agency may request the Administrator to waive the requirement contained in subparagraph (A). Such request shall include an explanation of why the waiver is necessary. The Administrator may grant the waiver based on a determination that the agency has demonstrated a sufficient need for the waiver, that the outreach objectives of the agency are being met, and that there is increased participation by States with respect to which a low level of SBIR awards have historically been awarded.

(3) PERFORMANCE CRITERIA.—A Federal agency may not use funds as authorized under paragraph (1) until after the effective date of performance criteria, which the Administrator shall establish, to measure any benefits of using funds as authorized under paragraph (1) and to assess continuation of the authority under paragraph (1).

(4) RULES.—Not later than 180 days after the date of enactment of this subsection, the Administrator shall issue rules to

carry out this subsection.

(5) COORDINATION WITH IG.—Each Federal agency shall coordinate the activities funded under subparagraph (E), (F), or (G) of paragraph (1) with their respective Inspectors General, when appropriate, and each Federal agency that allocates more than \$50,000,000 to the SBIR program of the Federal agency

for a fiscal year may share such funding with its Inspector General when the Inspector General performs such activities.

- (6) Reporting.—The Administrator shall collect data and provide to the Committee on Small Business and Entrepreneurship of the Senate and the Committee on Small Business, the Committee on Science, Space, and Technology, and the Committee on Appropriations of the House of Representatives a report on the use of funds under this subsection, including funds used to achieve the objectives of paragraph (2)(A) and any use of the waiver authority under paragraph (2)(B).

 (nn) Annual Report on SBIR and STTR Program Goals.—
- (1) DEVELOPMENT OF METRICS.—The head of each Federal agency required to participate in the SBIR program or the STTR program shall develop metrics to evaluate the effectiveness and the benefit to the people of the United States of the SBIR program and the STTR program of the Federal agency that—
 - (A) are science-based and statistically driven;(B) reflect the mission of the Federal agency; and

(C) include factors relating to the economic impact of the programs.

(2) EVALUATION.—The head of each Federal agency described in paragraph (1) shall conduct an annual evaluation using the metrics developed under paragraph (1) of—

(A) the SBIR program and the STTR program of the

Federal agency; and

(B) the benefits to the people of the United States of the SBIR program and the STTR program of the Federal agen-

(3) Report.—

(A) IN GENERAL.—The head of each Federal agency described in paragraph (1) shall submit to the appropriate committees of Congress and the Administrator an annual report describing in detail the results of an evaluation conducted under paragraph (2).

(B) PUBLIC AVAILABILITY OF REPORT.—The head of each Federal agency described in paragraph (1) shall make each report submitted under subparagraph (A) available to the

public online.

(C) DEFINITION.—In this paragraph, the term "appropriate committees of Congress" means—

(i) the Committee on Small Business and Entrepre-

neurship of the Senate; and

(ii) the Committee on Small Business and the Committee on Science, Space, and Technology of the House of Representatives.

(00) COMPETITIVE SELECTION PROCEDURES FOR SBIR AND STTR PROGRAMS.—All funds awarded, appropriated, or otherwise made available in accordance with subsection (f) or (n) must be awarded pursuant to competitive and merit-based selection procedures.

(pp) Limitation on Pilot Programs.—

(1) EXISTING PILOT PROGRAMS.—The Administrator may only carry out a covered pilot program that is in operation on the date of enactment of this subsection during the 3-year period beginning on such date of enactment.

(2) NEW PILOT PROGRAMS.—The Administrator may only carry out a covered pilot program established after the date of enactment of this subsection—

(A) during the 3-year period beginning on the date on

which such program is established; and

(B) if such program does not continue and is not based on, in any manner, a previously established covered pilot program.

(3) COVERED PILOT PROGRAM DEFINED.—In this subsection, the term "covered pilot program" means any initiative, project,

innovation, or other activity—

(A) established by the Administrator;

(B) relating to an SBIR or STTR program; and

(C) not specifically authorized by law. (qq) MINIMUM STANDARDS FOR PARTICIPATION.—

(1) Progress to phase II success.—

(A) ESTABLISHMENT OF SYSTEM AND MINIMUM COMMERCIALIZATION RATE.—Not later than 1 year after the date of enactment of this subsection, the head of each Federal agency participating in the SBIR or STTR program shall—

(i) establish a system to measure, where appropriate, the success of small business concerns with respect to the receipt of Phase II SBIR or STTR awards for projects that have received Phase I SBIR or STTR

awards;

(ii) establish a minimum performance standard for small business concerns with respect to the receipt of Phase II SBIR or STTR awards for projects that have received Phase I SBIR or STTR awards; and

(iii) begin evaluating, each fiscal year, whether each small business concern that received a Phase I SBIR or STTR award from the agency meets the minimum performance standard established under clause (ii).

- (B) CONSEQUENCE OF FAILURE TO MEET MINIMUM COMMERCIALIZATION RATE.—If the head of a Federal agency determines that a small business concern that received a Phase I SBIR or STTR award from the agency is not meeting the minimum performance standard established under subparagraph (A)(ii), such concern may not participate in Phase I (or Phase II if under the authority of subsection (cc)) of the SBIR or STTR program of that agency during the 1-year period beginning on the date on which such determination is made.
- (2) Progress to phase III success.—

(A) ESTABLISHMENT OF SYSTEM AND MINIMUM COMMERCIALIZATION RATE.—Not later than 2 years after the date of enactment of this subsection, the head of each Federal agency participating in the SBIR or STTR program shall—

(i) establish a system to measure, where appropriate, the success of small business concerns with respect to the receipt of Phase III SBIR or STTR awards for projects that have received Phase I SBIR or STTR awards:

(ii) establish a minimum performance standard for small business concerns with respect to the receipt of

Phase III SBIR or STTR awards for projects that have received Phase I SBIR or STTR awards; and

(iii) begin evaluating, each fiscal year, whether each small business concern that received a Phase I SBIR or STTR award from the agency meets the minimum performance standard established under clause (ii).

- (B) Consequence of failure to meet minimum com-MERCIALIZATION RATE.—If the head of a Federal agency determines that a small business concern that received a Phase I SBIR or STTR award from the agency is not meeting the minimum performance standard established under subparagraph (A)(ii), such concern may not participate in Phase I (or Phase II if under the authority of subsection (cc)) of the SBIR or STTR program of that agency during the 1-year period beginning on the date on which such determination is made.
- (3) Administration oversight.—
 - (A) APPROVAL AND PUBLICATION OF SYSTEMS AND MIN-IMUM PERFORMANCE STANDARDS.—Each system and minimum performance standard established under paragraph (1) or paragraph (2) shall be submitted by the head of the applicable Federal agency to the Administrator and shall be subject to the approval of the Administrator. In making a determination with respect to approval, the Administrator shall ensure that the minimum performance standard exceeds a de minimis level. The Administrator shall publish on the Internet Web site of the Administration the systems and minimum performance standards approved.

(B) Submission of evaluation results by agency.-The head of each covered Federal agency shall submit to the Administrator the results of each evaluation conducted

under paragraph (1) or paragraph (2).

(4) REQUIREMENT OF NOTICE AND COMMENT.—Each system and minimum performance standard established under paragraph (1) or paragraph (2) and each approval provided by the Administrator under paragraph (3)(A), at least 60 days before becoming effective, shall be preceded by the provision of notice of and an opportunity for public comment on such system, standard, or approval.

(rr) Publication of Certain Information.—In order to increase the number of small businesses receiving awards under the SBIR or STTR programs of participating agencies, and to simplify the application process for such awards, the Administrator shall establish and maintain a public Internet Web site on which the Administrator shall publish such information relating to notice of and application for awards under the SBIR program and STTR program of each participating Federal agency as the Administrator deter-

mines appropriate.

(SS) REPORT ON ENHANCEMENT OF MANUFACTURING ACTIVITIES.— Not later than October 1, 2013, and annually thereafter, the head of each Federal agency that makes more than \$50,000,000 in awards under the SBIR and STTR programs of the agency combined shall submit to the Administrator, for inclusion in the annual report required under subsection (b)(7), information that includes(1) a description of efforts undertaken by the head of the Federal agency to enhance United States manufacturing activities:

(2) a comprehensive description of the actions undertaken each year by the head of the Federal agency in carrying out the SBIR or STTR program of the agency in support of Executive Order 13329 (69 Fed. Reg. 9181; relating to encouraging innovation in manufacturing);

(3) an assessment of the effectiveness of the actions described in paragraph (2) at enhancing the research and development of United States manufacturing technologies and proc-

esses;

(4) a description of efforts by vendors selected to provide discretionary technical assistance under subsection (q)(1) to help SBIR and STTR concerns manufacture in the United States; and

(5) recommendations that the program managers of the SBIR or STTR program of the agency consider appropriate for additional actions to increase the effectiveness of enhancing manufacturing activities.

(tt) Encouraging Innovation in United States Manufacturing.—In carrying out this section, the Administrator shall—

(1) ensure that, in selecting small business concerns to participate in SBIR or STTR programs under this section, Federal agencies give high priority to small manufacturing companies and other small business concerns that are engaged in manufacturing research and development for the purpose of developing and producing new products and technologies in the United States; and

(2) include in the annual report to Congress under subsection (b)(7) a determination of whether the priority described in para-

graph (1) is being carried out.

(uu) Encouraging Innovation in Cybersecurity.—In carrying

out this section, the Administrator shall—

(1) ensure that, in selecting small business concerns to participate in SBIR or STTR programs under this section, Federal agencies give high priority to small business concerns that are engaged in cybersecurity research and development, for the purpose of developing and implementing technology services and products to strengthen the security of United States Government and private computer systems, including software, hardware, and portable devices; and

(2) include in the annual report to Congress under subsection (b)(7) a determination of whether the priority described in para-

graph (1) is being carried out.

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